

## Product References

### Clonetics® Human Endothelial Cells

---

#### Cells

##### General/Multiple Endo Cell Types\*

1. Abdel-Ghany M, Cheng HC, Elble RC, Pauli BU. The breast cancer beta 4 integrin and endothelial human CLCA2 mediate lung metastasis. *J Biol Chem.* 2001 Jul 6;276(27):25438-46.
2. Abid MR, Spokes KC, Shih SC, Aird WC. NADPH oxidase activity selectively modulates vascular endothelial growth factor signaling pathways. *J Biol Chem.* 2007 Nov 30;282(48):35373-85.
3. Abid MR, Tsai JC, Spokes KC, Deshpande SS, Irani K, Aird WC. Vascular endothelial growth factor induces manganese-superoxide dismutase expression in endothelial cells by a Rac1-regulated NADPH oxidase-dependent mechanism. *FASEB J.* 2001 Nov;15(13):2548-50.
4. Amin DN, Hida K, Bielenberg DR, Klagsbrun M. Tumor endothelial cells express epidermal growth factor receptor (EGFR) but not ErbB3 and are responsive to EGF and to EGFR kinase inhibitors. *Cancer Res.* 2006;66(4):2173-80.
5. Angelini DJ, Hyun SW, Grigoryev DN, Garg P, Gong P, Singh IS, Passaniti A, Hasday JD, Goldblum SE. TNF-alpha increases tyrosine phosphorylation of vascular endothelial cadherin and opens the paracellular pathway through fyn activation in human lung endothelia. *Am J Physiol Lung Cell Mol Physiol.* 2006;291(6):L1232-45.
6. Arnold R, König W. Respiratory syncytial virus infection of human lung endothelial cells enhances selectively intercellular adhesion molecule-1 expression. *J Immunol.* 2005 Jun 1;174(11): 7359-67.
7. Bagley RG, Walter-Yohrling J, Cao X, Weber W, Simons B, Cook BP, Chartrand SD, Wang C, Madden SL, Teicher BA. Endothelial precursor cells as a model of tumor endothelium: characterization and comparison with mature endothelial cells. *Canc Res.* 2003 Jan; 63: 5866-73.
8. Banerjee D, Rodriguez M, Nag M, Adamson JW. Exposure of endothelial cells to recombinant human erythropoietin induces nitric oxide synthase activity. *Kidney Int.* 2000 May;57(5):1895-904.
9. Borgne-Sanchez A, Dupont S, Langonné A, Baux L, Lecoœur H, Chauvier D, Lassalle M, Déas O, Brière JJ, Brabant M, Roux P, Péchoux C, Briand JP, Hoebeke J, Deniaud A, Brenner C, Rustin P, Edelman L, Rebouillat D, Jacotot E. Targeted Vpr-derived peptides reach mitochondria to induce apoptosis of alphaVbeta3-expressing endothelial cells. *Cell Death Differ.* 2007; 14(3):422-35.
10. Bouzin C, Brouet A, De Vriese J, Dewever J, Feron O. Effects of vascular endothelial growth factor on the lymphocyte-endothelium interactions: identification of caveolin-1 and nitric oxide as control points of endothelial cell anergy. *J Immunol.* 2007; 178(3):1505-11.
11. Carpentier YA, Dupont I, Portois L, Malaisse WJ. Preclinical investigations of a medium-chain triglyceride: fish oil emulsion III. Experiments in cultured endothelial cells. *Int J Mol Med.* 2006;18(6):1177-85.
12. Chang S, Young BD, Li S, Qi X, Richardson JA, Olson EN. Histone deacetylase 7 maintains vascular integrity by repressing matrix metalloproteinase 10. *Cell.* 2006; 126(2):321-34.
13. Chi JT, Chang HY, Haraldsen G, Jahnsen FL, Troyanskaya OG, Chang DS, Wang Z, Rockson SG, van de Ringjin M, Botstein D, Brown PO. Endothelial cell diversity revealed by global expression profiling. *PNAS.* 2003; 100(19): 10623-8.

14. Dasgupta P, Rastogi S, Pillai S, Ordonez-Ercan D, Morris M, Haura E, Chellappan S. Nicotine induces cell proliferation by beta-arrestin-mediated activation of Src and Rb-Raf-1 pathways. *J Clin Invest.* 2006; 116(8):2208-2217.
15. Denmeade SR, Jakobsen CM, Janssen S, Khan SR, Garrett ES, Lilja H, Christensen SB, Isaacs JT. Prostate-specific antigen-activated thapsigargin prodrug as targeted therapy for prostate cancer. *J Natl Cancer Inst.* 2003 Jul 02; 95(13): 990-1000.
16. Dhanabal M, Ramchandran R, Waterman MJF, Lu H, Knebelmann B, Segal, M, Sukhatme VP. Endostatin induces endothelial cell apoptosis. *Biologic Chem.* 1999; 274(17): 11721-6.
17. Dyugovskaya L, Lavie P, Lavie L. Increased adhesion molecules expression and production of reactive oxygen species in leukocytes of sleep apnea patients. *Am J Respir Crit Care Med.* 2002; 165: 934-9.
18. Favier B, Alam A, Barron P, Bonnin J, Laboudie P, Fons P, Mandron M, Herault JP, Neufeld G, Savi P, Herbert JM, Bono F. Neuropilin-2 interacts with VEGFR-2 and VEGFR-3 and promotes human endothelial cell survival and migration. *Blood.* 2006; 108(4):1243-50.
19. Fujiwara M, Jin E, Ghazizadeh M, Kawanami O. An in vitro model to evaluate regulatory mechanisms of antigen expression by normal pulmonary vessel endothelial cells. *Microvasc Res.* 2001 Mar;61(2):215-9.
20. Garrett TA, Van Buul JD, Burrige K. VEGF-induced Rac1 activation in endothelial cells is regulated by the guanine nucleotide exchange factor Vav2. *Exp Cell Res.* 2007 Sep 10;313(15):3285-97.
21. Ge X, Low B, Liang M, Fu J. Angiotensin II directly triggers endothelial exocytosis via protein kinase C-dependent protein kinase D2 activation. *J Pharmacol Sci.* 2007 Oct;105(2):168-76.
22. Ghosh S, Ezban M, Persson E, Pendurthi U, Hedner U, Rao LV. Activity and regulation of factor VIIa analogs with increased potency at the endothelial cell surface. *J Thromb Haemost.* 2007; 5(2): 336-46.
23. Glod J, Kobiler D, Noel M, Koneru R, Lehrer S, Medina D, Maric D, Fine HA. Monocytes form a vascular barrier and participate in vessel repair after brain injury. *Blood.* 2006;107(3):940-6.
24. Guo W, Wise ML, Collins FW, Meydani M. Avenanthramides, polyphenols from oats, inhibit IL-1beta-induced NF-kappaB activation in endothelial cells. *Free Radic Biol Med.* 2008 Feb 1;44(3):415-29.
25. Hassan HH, Denis M, Krimbou L, Marcil M, Genest J. Cellular cholesterol homeostasis in vascular endothelial cells. *Can J Cardiol.* 2006; 22 Suppl B:35B-40B.
26. Hayashi H, Nakagami H, Takami Y, Sato N, Saito Y, Nishikawa T, Mori M, Koriyama H, Tamai K, Morishita R, Kaneda Y. Involvement of gamma-secretase in postnatal angiogenesis. *Biochem Biophys Res Commun.* 2007 Nov 23;363(3):584-90.
27. Ho M, Yang E, Marcuk G, Deng D, Sampas N, Tsalenko A, Tabibiazar R, Zhang Y, Chen M, Talbi S, Ho YD, Wang J, Tsao PS, Bendor A, Yakhini Z, Bruhn L, Quertermous T. Identification of endothelial cell genes by combined database mining and microarray analysis. *Physiol Genom.* 2003; 13: 249-62.
28. Iantorno M, Chen H, Kim J, Tesauro M, D Lauro, Cardillo C, Quon MJ. Ghrelin has novel vascular actions that mimic PI 3-kinase-dependent actions of insulin to stimulate production of NO from endothelial cells. *Am J Physiol Endocrinol Metab.* 2007; 292: E756-64.
29. Ingram DA, Mead LE, Moore DB, Woodard W, Fenoglio A, Yoder MC. Vessel wall-derived endothelial cells rapidly proliferate because they contain a complete hierarchy of endothelial progenitor cells. *Blood.* 2005;105(7):2783-6.
30. Ito A, Ino K, Hayashida M, Kobayashi T, Matsunuma H, Kagami H, Ueda M, Honda H. Novel methodology for fabrication of tissue-engineered tubular constructs using magnetite nanoparticles and magnetic force. *Tiss Engin.* 2005; 11(9/10): 1553-61.
31. Kälin RE, Kretz MP, Meyer AM, Kispert A, Heppner FL, Brändli AW. Paracrine and autocrine mechanisms of apelin signaling govern embryonic and tumor angiogenesis. *Developmental Biology.* 2007; 305(2): 599-614.
32. Kalra AV, Campbell RB. Development of 5-FU and doxorubicin-loaded cationic liposomes against human pancreatic cancer: Implications for tumor vascular targeting. *Pharm Res.* 2006 Dec;23(12):2809-17.
33. Kanno H, Watabe D, Shimizu N, Sawai T. Adhesion of Epstein-Barr virus-positive natural killer cell lines to cultured endothelial

- cells stimulated with inflammatory cytokines. *Clin Exp Immunol.* 2008 Mar;151(3):519-27.
34. Karrar A, Broomé U, Uzunel M, Qureshi AR, Sumitran-Holgersson S. Human liver sinusoidal endothelial cells induce apoptosis in activated T cells: a role in tolerance induction. *Gut.* 2007; 56(2): 243-52.
  35. Kitajima T, Terai H, Ito Y. A fusion protein of hepatocyte growth factor for immobilization to collagen. *Biomaterials.* 2007 Apr;28(11):1989-97.
  36. Kiyono M, Shibuya M. Inhibitory Smad transcription factors protect arterial endothelial cells from apoptosis induced by BMP4. *Oncogene.* 2006; 25(54):7131-7.
  37. Krishnaswamy G, Smith JK, Mukkamala R, Hall K, Joyner W, Yerra L, Chi, DS. Multifunctional cytokine expression by human coronary endothelium and regulation by monokines and glucocorticoids. *Microvasc Res.* 1998; 55: 189-200.
  38. Lechner D, Kollars M, Gleiss A, Kyrle PA, Weltermann A. Chemotherapy-induced thrombin generation via procoagulant endothelial microparticles is independent of tissue factor activity. *J Thromb Haemost.* 2007 Dec;5(12):2445-52.
  39. Leung KH, Pippalla V, Kreutter A, Chandler M. Functional effects of FGF-13 on human lung fibroblasts, dermal microvascular endothelial cells, and aortic smooth muscle cells. *Biochem and Biophys Res Comm.* 1998; 250: 137-42.
  40. Liu D, Kobayashi T, Onishi A, Furusawa T, Iwamoto M, Suzuki S, Miwa Y, Nagasaka T, Maruyama S, Kadomatsu K, Uchida K, Nakao A. Relation between human decay-accelerating factor (hDAF) expression in pig cells and inhibition of human serum anti-pig cytotoxicity: value of highly expressed hDAF for xenotransplantation. *Xenotransplantation.* 2007 Jan;14(1):67-73.
  41. Lokeshwar VB, Selzer MG. Differences in hyaluronic acid-mediated functions and signaling in arterial, microvessel, and vein-derived human endothelial cells. *J Biol chem.* 2000; 275(36): 27641-9.
  42. Maidji E, Percivalle E, Gerna G, Fisher S, Pereira L. Transmission of human cytomegalovirus from infected uterine microvascular endothelial cells to differentiating/invasive placental cytotrophoblasts. *Virology.* 2002 Dec 5;304(1):53-69.
  43. Manavalan JS, Kim-Schulze S, Scotto L, Naiyer AJ, Vlad G, Colombo PC, Marboe C, Mancini D, Cortesini R, Suci-Foca N. Alloantigen specific CD8+CD28- FOXP3+ T suppressor cells induce ILT3+ ILT4+ tolerogenic endothelial cells, inhibiting alloreactivity. *Int Immunol.* 2004;16(8):1055-68.
  44. Maus U, Seeger W, Lohmeyer J. Impact of a phosphorothioate oligodeoxynucleotide MCP-1 on NF-kappaB, AP-1, SP1 and NF-kappaB, and AP-1 subunit composition in human pulmonary endothelial cells. *Antisense Nucleic Acid Drug Dev.* 2001 Feb;11(1):59-64.
  45. Mishima Y, Terui Y, Sugimura N, Matsumoto-Mishima Y, Rokudai A, Kuniyoshi R, Hatake K. Continuous treatment of bestatin induces anti-angiogenic property in endothelial cells. *Cancer Sci.* 2007 Mar;98(3): 364-72.
  46. Montero I, Orbe J, Varo N, Beloqui O, Monreal JI, Rodríguez JA, Díez J, Libby P, Páramo JA. C-reactive protein induces matrix metalloproteinase-1 and -10 in human endothelial cells: implications for clinical and subclinical atherosclerosis. *J Am Coll Cardiol.* 2006; 47(7):1369-78.
  47. Mu H, Ohashi R, Yan S, Chai H, Yang H, Lin P, Yao Q, Chen C. Adipokine resistin promotes in vitro angiogenesis of human endothelial cells. *Cardiovasc Res.* 2006; 70(1):146-57.
  48. Netherton SJ, Sutton JA, Wilson LS, Carter RL, Maurice DH. Both protein kinase A and exchange protein activated by cAMP coordinate adhesion of human vascular endothelial cells. *Circ Res.* 2007 Oct 12;101(8):768-76.
  49. Nordskog BK, Blixt AD, Morgan WT, Fields WR, Hellman GM. Matrix-degrading and pro-inflammatory changes in human vascular endothelial cells exposed to cigarette smoke condensate. *Cardiovasc Tox.* 2003; 3(2): 101-18.
  50. O'Connell BJ, Denis M, Genest J. Cellular physiology of cholesterol efflux in vascular endothelial cells. *Circ.* 2004; 110: 2881-8.
  51. Orlova VV, Economopoulou M, Lupu F, Santoso S, Chavakis T. Junctional adhesion molecule-C regulates vascular endothelial permeability by modulating VE-cadherin-mediated cell-cell contacts. *J Exp Med.* 2006 Nov; 203(12):2703-14.
  52. Qian Z, Haessler M, Lemos JA, Arsenault JR, Aguirre JE, Gilbert JR, Bowler RP, Park F. Targeting vascular injury using Hantavirus-pseudotyped lentiviral vectors. *Mol Ther.* 2006;13(4):694-704.

53. Qin P, Tang X, Elloso MM, Harnish DC. Bile acids induce adhesion molecule expression in endothelial cells through activation of reactive oxygen species, NF- $\kappa$ B, and p38. *Am J Physiol Heart Circ Physiol.* 2006; 291(2):H741-7.
54. Rehman J, Traktuev D, Li J, Merfeld-Clauss S, Temm-Grove CJ, Bovenkerk JE, Pell CL, Johnstone BH, Considine RV, March KL. Secretion of angiogenic and antiapoptotic factors by human adipose stromal cells. *Circ.* 2004; 109: 1292-8.
55. Rohde E, Malischnik C, Thaler D, Maierhofer T, Linkesch W, Lanzer G, Guelly C, Strunk D. Blood monocytes mimic endothelial progenitor cells. *Stem Cells.* 2006; 24(2): 357-67.
56. Sánchez FA, Savalia NB, Durán RG, Lal BK, Boric MP, Durán WN. Functional significance of differential eNOS translocation. *Am J Physiol Heart Circ Physiol.* 2006;291(3):H1058-64.
57. Shanker G, Kontos JL, Eckman DM, Wesley-Farrington D, Sane DC. Nicotine upregulates the expression of P2Y12 on vascular cells and megakaryoblasts. *J Thromb Thrombolysis.* 2006; 22(3): 213-20.
58. Silva G, Cunha A, Grégoire IP, Seldon MP, Soares MP. The antiapoptotic effect of heme oxygenase-1 in endothelial cells involves the degradation of p38 alpha MAPK isoform. *J Immunol.* 2006;177(3):1894-903.
59. Sung HJ, Yee A, Eskin SG, McIntire LV. Cyclic strain and motion control produce opposite oxidative responses in two human endothelial cell types. *Am J Physiol Cell Physiol.* 2007 Jul;293(1):C87-94.
60. Takeuchi M, Harigai M, Momohara S, Ball E, Abe J, Furuichi K, Kamatani N. Cloning and characterization of DPPL1 and DPPL2, representatives of a novel type of mammalian phosphatidate phosphatase. *Gene.* 2007 Sep 15;399(2):174-80.
61. Tripal P, Bauer M, Naschberger E, Mörtinger T, Hohenadl C, Cornali E, Thurau M, Stürzl M. Unique features of different members of the human guanylate-binding protein family. *J Interferon Cytokine Res.* 2007; 27(1):44-52.
62. Uhlenbrock K, Huber J, Ardati A, Busch AE, Kostenis E. Fluid shear stress differentially regulates gpr3, gpr6, and gpr12 expression in human umbilical vein endothelial cells. *Cell Physiol Biochem.* 2003;13(2):75-84.
63. Urbich C, Dernbach E, Reissner A, Vasa M, Zeiher AM, Dimmeler S. Shear stress-induced integrin signaling via the fibronectin receptor subunits  $\alpha_5$  and  $\beta_1$ . *Arterioscler Thromb Vasc Biol.* 2001; 22: 69-75.
64. Voisard R, Alan M, von Müller L, Baur R, Hombach V. Effects of abciximab on key pattern of human coronary restenosis in vitro: impact of the SI/MPL-ratio. *BMC Cardiovasc Disord.* 2006 Apr 4; 6:14.
65. von Wronski MA, Raju N, Pillai R, Bogdan NJ, Marinelli ER, Nanjappan P, Ramalingam K, Arunachalam T, Eaton S, Linder KE, Yan F, Pochon S, Tweedle MF, Nunn AD. Tuftsin binds neuropilin-1 through a sequence similar to that encoded by exon 8 of vascular endothelial growth factor. *J Biol Chem.* 2006; 281(9):5702-10.
66. Wang S, Li X, Parra M, Verdin E, Bassel-Duby R, Olson EN. Control of endothelial cell proliferation and migration by VEGF signaling to histone deacetylase 7. *Proc Natl Acad Sci U S A.* 2008 Jun 3;105(22):7738-43.
67. Watabe D, Kanno H, Yoshida A, Kurose A, Akasaka T, Sawai T. Adhesion of peripheral blood mononuclear cells and CD4+ T cells from patients with psoriasis to cultured endothelial cells via the interaction between lymphocyte function-associated antigen type 1 and intercellular adhesion molecule 1. *Br J Dermatol.* 2007 Aug;157(2):259-65.
68. Yamakuchi M, Kirkiles-Smith NC, Ferlito M, Cameron SJ, Bao C, Fox-Talbot K, Wasowska BA, Baldwin WM 3rd, Pober JS, Lowenstein CJ. Antibody to human leukocyte antigen triggers endothelial exocytosis. *Proc Natl Acad Sci U S A.* 2007 Jan 23;104(4):1301-6.
69. Yang H, Li M, Chai H, Yan S, Lin P, Lumsden AB, Yao Q, Chen C. Effects of cyclophilin A on cell proliferation and gene expressions in human vascular smooth muscle cells and endothelial cells. *J Surg Res.* 2005 Feb;123(2):312-9.
70. Yang Z-Y, Huang Y, Ganesh L, Leung K, Kong W-P, Schqartz O, Subbarao K, Nabel GJ. pH-dependent entry of severe acute respiratory syndrome coronavirus is mediated by the spike glycoprotein and enhanced by dendritic cell transfer through DC-SIGN. *J Virol.* 2004 Jun; 78(11): 5642-50.
71. Zarei S, Frieden M, Rubi B, Villemin P, Gauthier BR, Maechler P, Vischer UM. Dopamine modulates von Willebrand factor secretion in endothelial cells via D2-D4

receptors. *J Thromb Haemost.* 2006; 4(7): 1588-95.

72. Zhang H, Zhang H, Lin Y, Li J, Pober JS, Min W. RIP1-mediated AIP1 phosphorylation at a 14-3-3-binding site is critical for tumor necrosis factor-induced ASK1-JNK/p38 activation. *J Biol Chem.* 2007 May 18;282(20):14788-96.

## HAEC<sup>+</sup>

1. Abe Y, Fornage M, Yang CY, Bui-Thanh NA, Wise V, Chen HH, Rangaraj G, Ballantyne CM. L5, the most electronegative subfraction of plasma LDL, induces endothelial vascular cell adhesion molecule 1 and CXC chemokines, which mediate mononuclear leukocyte adhesion. *Atherosclerosis.* 2007 May;192(1):56-66.
2. Banfi C, Brioschi M, Barcella S, Pignieri A, Parolari A, Biglioli P, Tremoli E, Mussoni L. Tissue factor induction by protease-activated receptor 1 requires intact caveolin-enriched membrane microdomains in human endothelial cells. *J Thromb Haemost.* 2007 Dec;5(12):2437-44.
3. Barilli A, Visigalli R, Sala R, Gazzola GC, Parolari A, Tremoli E, Bonomini S, Simon A, Closs EI, Dall'asta V, Bussolati O. In human endothelial cells rapamycin causes mTORC2 inhibition and impairs cell viability and function. *Cardiovasc Res.* 2008 Jun 1;78(3):563-71.
4. Brailoiu E, Jiang X, Brailoiu GC, Yang J, Chang JK, Wang H, Dun NJ. State-dependent calcium mobilization by urotensin-II in cultured human endothelial cells. *Peptides.* 2008 May;29(5):721-6.
5. Brunn GJ, Saadi S, Platt JL. Differential regulation of endothelial cell activation by complement and interleukin 1alpha. *Circ Res.* 2006;98(6):793-800.
6. Chen XL, Grey JY, Thomas S, Qiu FH, Medford RM, Wasserman MA, Kunsch C. Sphingosine kinase-1 mediates TNF-alpha-induced MCP-1 gene expression in endothelial cells: upregulation by oscillatory flow. *Am J Physiol Heart Circ Physiol.* 2004;287(4):H1452-8.
7. Connelly JJ, Shah SH, Doss JF, Gadson S, Nelson S, Crosslin DR, Hale AB, Lou X, Wang T, Haynes C, Seo D, Crossman DC, Mooser V, Granger CB, Jones CJ, Kraus WE, Hauser ER, Gregory SG. Genetic and functional association of FAM5C with myocardial infarction. *BMC Med Genet.* 2008 Apr 22;9:33.
8. Cosentino F, Hürlimann D, Delli Gatti C, Chenevard R, Blau N, Alp NJ, Channon KM, Eto M, Lerch P, Enseleit F, Ruschitzka F, Volpe M, Lüscher TF, Noll G. Chronic Treatment with Tetrahydrobiopterin Reverses Endothelial Dysfunction and Oxidative Stress in Hypercholesterolemia. *Heart.* 2007 Oct 4 [Epub ahead of print]
9. Dagia NM, Harii N, Meli AE, Sun X, Lewis CJ, Kohn LD, Goetz DJ. Phenyl methimazole inhibits TNF-alpha-induced VCAM-1 expression in an IFN regulatory factor-1-dependent manner and reduces monocytic cell adhesion to endothelial cells. *J Immunol.* 2004;173(3):2041-9.
10. Dasu MR, Devaraj S, Du Clos TW, Jialal I. The biological effects of CRP are not attributable to endotoxin contamination: evidence from TLR4 knockdown human aortic endothelial cells. *J Lipid Res.* 2007 Mar;48(3):509-12.
11. Devaraj S, Davis B, Simon SI, Jialal I. CRP promotes monocyte-endothelial cell adhesion via Fc gamma receptors in human aortic endothelial cells under static and shear flow conditions. *Am J Physiol Heart Circ Physiol.* 2006; 291(3): H1170-6.
12. Gosmanov AR, Stentz FB, Kitabchi AE. De novo emergence of insulin-stimulated glucose uptake in human aortic endothelial cells incubated with high glucose. *Am J Physiol Endocrinol Metab.* 2006; 290(3):E516-22.
13. Haddad L, El Hajj H, Abou-Merhi R, Kfoury Y, Mahieux R, El-Sabban M, Bazarbachi A. KSHV-transformed primary effusion lymphoma cells induce a VEGF-dependent angiogenesis and establish functional gap junctions with endothelial cells. *Leukemia.* 2008 Apr;22(4):826-34.
14. Iantorno M, Chen H, Kim JA, Tesauro M, Lauro D, Cardillo C, Quon MJ. Ghrelin has novel vascular actions that mimic PI 3-kinase-dependent actions of insulin to stimulate production of NO from endothelial cells. *Am J Physiol Endocrinol Metab.* 2007 Mar;292(3):E756-64.
15. Jiang X, Yang F, Brailoiu E, Jakubowski H, Dun NJ, Schafer AI, Yang X, Durante W, Wang H. Differential regulation of homocysteine transport in vascular endothelial and smooth muscle cells. *Arterioscler Thromb Vasc Biol.* 2007 Sep;27(9):1976-83.
16. Jin R, Greenwald A, Peterson MD, Waddell TK. Human monocytes recognize porcine endothelium via the interaction of galectin 3

- and alpha-GAL. *J Immunol.* 2006; 177(2):1289-95.
17. Johnson TL, Barabino GA, Nerem RM. Engineering more physiologic in vitro models for the study of vascular biology. *Progress in Pediatric Cardiology.* 2006; 21(2): 201-10.
  18. Johnson TL, Nerem RM. Endothelial connexin 37, connexin 40, and connexin 43 respond uniquely to substrate and shear stress. *Endothelium.* 2007 Jul-Oct; 14(4-5):215-26.
  19. Kawasaki K, Smith RS, Hsieh CM, Sun J, Chao J, Liao JK. Activation of the phosphatidylinositol 3-kinase/protein kinase Akt pathway mediates nitric oxide-induced endothelial cell migration and angiogenesis. *Mol Cell Biol.* 2003;23(16):5726-37.
  20. Kinkade R, Dasgupta P, Carie A, Pernazza D, Carless M, Pillai S, Lawrence N, Sebt SM, Chellappan S. A small molecule disruptor of Rb/Raf-1 interaction inhibits cell proliferation, angiogenesis, and growth of human tumor xenografts in nude mice. *Cancer Res.* 2008 May 15;68(10):3810-8.
  21. Lauer-Fields JL, Nagase H, Fields GB. Development of a solid-phase assay for analysis of matrix metalloproteinase activity. *J Biomol Tech.* 2004; 15: 305-16.
  22. Lepin EJ, Zhang Q, Zhang X, Jindra PT, Hong LS, Ayele P, Peralta MV, Gjertson DW, Kobashigawa JA, Wallace WD, Fishbein MC, Reed EF. Phosphorylated S6 ribosomal protein: a novel biomarker of antibody-mediated rejection in heart allografts. *Am J Transplant.* 2006;6(7):1560-71.
  23. Li G, Del Rincon JP, Jahn LA, Wu Y, Gaylann B, Thorner MO, Liu Z. Growth hormone exerts acute vascular effects independent of systemic or muscle insulin-like growth factor I. *J Clin Endocrinol Metab.* 2008 Apr;93(4):1379-85.
  24. Liu D, Kobayashi T, Onishi A, Furusawa T, Iwamoto M, Suzuki S, Miwa Y, Nagasaka T, Maruyama S, Kadomatsu K, Uchida K, Nakao A. Relation between human decay-accelerating factor (hDAF) expression in pig cells and inhibition of human serum anti-pig cytotoxicity: value of highly expressed hDAF for xenotransplantation. *Xenotransplantation.* 2007; 14(1):67-73.
  25. Liu D, Si H, Reynolds KA, Zhen W, Jia Z, Dillon JS. Dehydroepiandrosterone protects vascular endothelial cells against apoptosis through a Galphai protein-dependent activation of phosphatidylinositol 3-kinase/Akt and regulation of antiapoptotic Bcl-2 expression. *Endocrinology.* 2007 Jul;148(7):3068-76.
  26. Macario DK, Entersz I, Paul Abboud J, Nackman GB. Inhibition of apoptosis prevents shear-induced detachment of endothelial cells. *J Surg Res.* 2008 Jun 15;147(2):282-9.
  27. Mangan S, Clancy P, Golledge J. Modulation of endothelial cell thrombomodulin by PPAR ligands--variation according to environment. *Thromb Res.* 2008;121(6):827-34.
  28. Miriuka SG, Rao V, Peterson M, Tumati L, Delgado DH, Mohan R, Ramzy D, Stewart D, Ross HJ, Waddell TK. mTOR inhibition induces endothelial progenitor cell death. *Am J Transplant.* 2006;6(9):2069-79.
  29. Mohan S, Koyoma K, Thangasamy A, Nakano H, Glickman RD, Mohan N. Low shear stress preferentially enhances IKK activity through selective sources of ROS for persistent activation of NF-kappaB in endothelial cells. *Am J Physiol Cell Physiol.* 2007 Jan;292(1):C362-71.
  30. Motlagh D, Allen J, Hoshi R, Yang J, Lui K, Ameer G. Hemocompatibility evaluation of poly(diols citrate) in vitro for vascular tissue engineering. *J Biomed Mater Res A.* 2007 Sep 15;82(4):907-16.
  31. Nakabe N, Kokura S, Shimosawa M, Katada K, Sakamoto N, Ishikawa T, Handa O, Takagi T, Naito Y, Yoshida N, Yoshikawa T. Hyperthermia attenuates TNF-alpha-induced up regulation of endothelial cell adhesion molecules in human arterial endothelial cells. *Int J Hyperthermia.* 2007 May;23(3):217-24.
  32. Opitz CA, Rimmerman N, Zhang Y, Mead LE, Yoder MC, Ingram DA, Walker JM, Rehman J. Production of the endocannabinoids anandamide and 2-arachidonoylglycerol by endothelial progenitor cells. *FEBS Lett.* 2007 Oct 16;581(25):4927-31.
  33. Park HS, Chun JN, Jung HY, Choi C, Bae YS. Role of NADPH oxidase 4 in lipopolysaccharide-induced proinflammatory responses by human aortic endothelial cells. *Cardiovasc Res.* 2006;72(3):447-55.
  34. Payeli SK, Schiene-Fischer C, Steffel J, Camici GG, Rozenberg I, Lüscher TF, Tanner FC. Cyclophilin A differentially activates monocytes and endothelial cells: role of purity, activity, and endotoxin contamination in commercial preparations.

- Atherosclerosis. 2008 Apr;197(2):564-71. Epub 2007 Oct 24.
35. Pearson LJ, Yandle TG, Nicholls MG, Evans JJ. Regulation of endothelin-1 release from human endothelial cells by sex steroids and angiotensin-II. *Peptides*. 2008 Jun;29(6):1057-61.
  36. Pereira FE, Coffin JD, Beall HD. Activation of protein kinase C and disruption of endothelial monolayer integrity by sodium arsenite--Potential mechanism in the development of atherosclerosis. *Toxicol Appl Pharmacol*. 2007 Apr 15;220(2):164-77.
  37. Ramesh N, Ge Y, Ennist DL, Zhu M, Mina M, Ganesh S, Reddy PS, Yu DC. CG0070, a conditionally replicating granulocyte macrophage colony-stimulating factor--armed oncolytic adenovirus for the treatment of bladder cancer. *Clin Cancer Res*. 2006;12(1):305-13.
  38. Roth GA, Moser B, Roth-Walter F, Giacona MB, Harja E, Papapanou PN, Schmidt AM, Lalla E. Infection with a periodontal pathogen increases mononuclear cell adhesion to human aortic endothelial cells. *Atherosclerosis*. 2007 Feb;190(2):271-81.
  39. Schneider C, Volk T. Endothelial Ca<sup>2+</sup> signal transduction is altered by postoperative serum from patients undergoing coronary surgery with cardiopulmonary bypass. *Anesth Analg*. 2006;102(6):1630-7.
  40. Selvakumar B, Hess DT, Goldschmidt-Clermont PJ, Stamler JS. Co-regulation of constitutive nitric oxide synthases and NADPH oxidase by the small GTPase Rac. *FEBS Lett*. 2008 Jun 25;582(15):2195-202.
  41. Si H, Liu D. Genistein, a soy phytoestrogen, upregulates the expression of human endothelial nitric oxide synthase and lowers blood pressure in spontaneously hypertensive rats. *J Nutr*. 2008 Feb;138(2):297-304.
  42. Simeonova PP, Hulderman T, Harki D, Luster MI. Arsenic exposure accelerates atherogenesis in apolipoprotein E<sup>-/-</sup> mice. *Env Health Perspec*. 2003 Nov; 111(14): 1744-8.
  43. Tanaka T, Porter CM, Horvath-Arcidiacono JA, Bloom ET. Lipophilic statins suppress cytotoxicity by freshly isolated natural killer cells through modulation of granule exocytosis. *Int Immunol*. 2007; 19(2): 163-73.
  44. Thampi P, Stewart BW, Joseph L, Melnyk SB, Hennings LJ, Nagarajan S. Dietary homocysteine promotes atherosclerosis in apoE-deficient mice by inducing scavenger receptors expression. *Atherosclerosis*. 2008 Apr;197(2):620-9.
  45. Vignini A, Nanetti L, Bacchetti T, Ferretti G, Curatola G, Mazzanti L. Modification induced by homocysteine and low-density lipoprotein on human aortic endothelial cells: an in vitro study. *J Clin Endocrinol Metab*. 2004;89(9):4558-61.
  46. Wacker BK, Alford SK, Scott EA, Das Thakur M, Longmore GD, Elbert DL. Endothelial cell migration on RGD-peptide-containing PEG hydrogels in the presence of sphingosine 1-phosphate. *Biophys J*. 2008 Jan 1;94(1):273-85.
  47. Wang S, Aurora AB, Johnson BA, Qi X, McAnally J, Hill JA, Richardson JA, Bassel-Duby R, Olson EN. An Endothelial-specific microRNA Governs Vascular Integrity and Angiogenesis. *Dev Cell*. 2008 August; 15(2): 261-271.
  48. Wang X, Zhang X, Castellot J, Herman I, lafrati M, Kaplan DL. Controlled release from multilayer silk biomaterial coatings to modulate vascular cell responses. *Biomaterials*. 2008 Mar;29(7):894-903.
  49. Zhang X, Baughman CB, Kaplan DL. In vitro evaluation of electrospun silk fibroin scaffolds for vascular cell growth. *Biomaterials*. 2008 May;29(14):2217-27.

## HCAEC

1. Abranches J, Zeng L, Bélanger M, Rodrigues PH, Simpson-Haidaris PJ, Akin D, Dunn WA Jr, Progulske-Fox A, Burne RA. Invasion of human coronary artery endothelial cells by *Streptococcus mutans* OMZ175. *Oral Microbiol Immunol*. 2009 Apr;24(2):141-5.
2. Andersen ND, Monahan TS, Malek JY, Jain M, Daniel S, Caron LD, Pradhan L, Ferran C, Logerfo FW. Comparison of gene silencing in human vascular cells using small interfering RNAs. *J Am Coll Surg*. 2007 Mar;204(3):399-408.
3. Apostolov EO, Basnakian AG, Yin X, Ok E, Shah SV. Modified LDLs induce proliferation-mediated death of human vascular endothelial cells through MAPK pathway. *Am J Physiol Heart Circ Physiol*. 2007 Apr;292(4):H1836-46.
4. Brahmabhatt VV, Nold C, Albert CJ, Ford DA. Quantification of pentafluorobenzyl oxime derivatives of long chain aldehydes by GC-MS analysis. *Lipids*. 2008 Mar;43(3):275-80.

5. Dahm AE, Iversen N, Birkenes B, Ree AH, Sandset PM. Estrogens, selective estrogen receptor modulators, and a selective estrogen receptor down-regulator inhibit endothelial production of tissue factor pathway inhibitor 1. *BMC Cardiovasc Disord.* 2006; 6: 40.
6. Dorn BR, Dunn Jr WA, Progulske-Fox A. Invasion of human coronary artery cells by periodontal pathogens. *Infect Immun.* 1999 Nov; 67(11): 5792-8.
7. Ferreira AM, Isaacs H, Hayflick JS, Rogers KA, Sandig M. The p110delta isoform of PI3K differentially regulates beta1 and beta2 integrin-mediated monocyte adhesion and spreading and modulates diapedesis. *Microcirculation.* 2006;13(6): 439-56.
8. Francini N, Bachli EB, Blau N, Leikauf M-S, Schaffner A, Schoedon G. Gene expression profiling of inflamed human endothelial cells and influence of activated protein C. *Circ.* 2004; 110: 2903-9.
9. Gieffers J, Solbach W, Maass M. In vitro susceptibility and eradication of chlamydia pneumoniae cardiovascular strains from coronary artery epithelium and smooth muscle cells. *Cardiovasc Drugs Ther.* 2001 May; 15(3): 259-62.
10. Gueinzius K, Magenau A, Erath S, Wittke V, Urbich C, Ferrando-May E, Dimmeler S, Hermann C. Endothelial cells are protected against phagocyte-transmitted *Chlamydia pneumoniae* infections by laminar shear stress. Shear stress protects from *C. pneumoniae* infection. *Atherosclerosis.* 2008 Jun;198(2):256-63.
11. He W, Yong T, Ma ZW, Inai R, Teo WE, Ramakrishna S. Biodegradable polymer nanofiber mesh to maintain functions of endothelial cells. *Tissue Eng.* 2006;12(9):2457-66.
12. Hillebrand U, Schillers H, Riethmüller C, Stock C, Wilhelmi M, Oberleithner H, Hausberg M. Dose-dependent endothelial cell growth and stiffening by aldosterone: endothelial protection by eplerenone. *J Hypertens.* 2007; 25(3):639-47.
13. Ikuta K, Mori T, Yamamoto T, Niidome T, Shimokawa H, Katayama Y. Development of polymeric drug delivery system for recognizing vascular endothelial dysfunction. *Bioorg Med Chem.* 2008 Mar 15;16(6):2811-8.
14. Iversen N, Birkenes B, Torsdalen K, Djurovic S. Electroporation by nucleofector is the best nonviral transfection technique in human endothelial and smooth muscle cells. *Genetic Vaccin Ther.* 2005; 3: 2-15.
15. Langheinrich AC, Sedding DG, Kampschulte M, Moritz R, Wilhelm J, Haberbosch WG, Ritman EL, Bohle RM. 3-Deazaadenosine inhibits vasa vasorum neovascularization in aortas of ApoE(-/-)/LDL(-/-) double knockout mice. *Atherosclerosis.* 2009 Jan;202(1):103-10.
16. Lehle K, Kunz-Schughart LA, Kuhn P, Schreml S, Birnbaum DE, Preuner JG. Validity of a patient-derived system of tissue-specific human endothelial cells: interleukin-6 as a surrogate marker in the coronary system. *Am J Physiol Heart Circ Physiol.* 2007 Sep;293(3):H1721-8.
17. Lenaerts L, McVey JH, Baker AH, Denby L, Nicklin S, Verbeken E, Naesens L. Mouse adenovirus type 1 and human adenovirus type 5 differ in endothelial cell tropism and liver targeting. *J Gene Med.* 2009 Feb;11(2):119-27.
18. Liu GX, Vepa S, Artman M, Coetzee WA. Modulation of human cardiovascular outward rectifying chloride channel by intra- and extracellular ATP. *Am J Physiol Heart Circ Physiol.* 2007 Dec;293(6):H3471-9.
19. Liu Y, Li H, Bubolz AH, Zhang DX, Gutterman DD. Endothelial cytoskeletal elements are critical for flow-mediated dilation in human coronary arterioles. *Med Biol Eng Comput.* 2008 May;46(5):469-78.
20. Malester B, Tong X, Ghu I, Kontogeorgis A, Gutstein DE, Xu J, Hendricks-Munoz KD, Coetzee WA. Transgenic expression of a dominant negative KATP channel subunit in the mouse endothelium: effects on coronary flow and endothelin-1 secretion. *FASEB J.* 2007; [Epub ahead of print].
21. Mezei C, Schumann J, Wagner A, Gross P. Effects of homocysteine on the levels of caveolin-1 and eNOS in caveolae of human coronary artery endothelial cells. *Atherosclerosis.* 2007 Feb;190(2):256-63.
22. Meyer MC, McHowat J. Calcium-independent phospholipase A2-catalyzed plasmalogen hydrolysis in hypoxic human coronary artery endothelial cells. *Am J Physiol Cell Physiol.* 2007; 292(1): C251-8.
23. Mu H, Ohashi R, Yang H, Wang X, Li M, Lin P, Yao Q, Chen C. Thymosin beta10 inhibits cell migration and capillary-like tube



- formation of human coronary artery endothelial cells. *Cell Motil Cytoskeleton*. 2006;63(4):222-30.
24. Ozaki K, Sato H, Inoue K, Tsunoda T, Sakata Y, Mizuno H, Lin TH, Miyamoto Y, Aoki A, Onouchi Y, Sheu SH, Ikegawa S, Odashiro K, Nobuyoshi M, Juo SH, Hori M, Nakamura Y, Tanaka T. SNPs in BRAP associated with risk of myocardial infarction in Asian populations. *Nat Genet*. 2009 Mar;41(3):329-33.
  25. Penumathsa SV, Koneru S, Thirunavukkarasu M, Zhan L, Prasad K, Maulik N. Secoisolariciresinol diglucoside: relevance to angiogenesis and cardioprotection against ischemia-reperfusion injury. *J Pharmacol Exp Ther*. 2007 Feb;320(2):951-9.
  26. Rastogi P, Beckett CS, McHowat J. Prostaglandin production in human coronary artery endothelial cells is modulated differentially by selective phospholipase A<sub>2</sub> inhibitors. *Prostaglandins, Leukotrienes and Essential Fatty Acids*. 2007; 76(4): 205-12.
  27. Rastogi P, White MC, Rickard A, McHowat J. Potential mechanism for recruitment and migration of CD133 positive cells to areas of vascular inflammation. *Thromb Res*. 2008;123(2):258-66.
  28. Rocic P, Kolz C, Reed R, Potter B, Chilian WM. Optimal reactive oxygen species concentration and p38 MAP kinase are required for coronary collateral growth. *Am J Physiol Heart Circ Physiol*. 2007 Jun;292(6):H2729-36.
  29. Ryu W, Min SW, Hammerick KE, Vyakarnam M, Greco RS, Prinz FB, Fasching RJ. The construction of three-dimensional micro-fluidic scaffolds of biodegradable polymers by solvent vapor based bonding of micro-molded layers. *Biomaterials*. 2007; 28(6):1174-84.
  30. Schreml S, Lehle K, Birnbaum DE, Preuner JG. mTOR-inhibitors simultaneously inhibit proliferation and basal IL-6 synthesis of human coronary artery endothelial cells. *Int Immunopharmacol*. 2007 Jun;7(6):781-90.
  31. Suzuki Y, Ichiyama T, Ohsaki A, Hasegawa S, Shiraishi M, Furukawa S. Anti-inflammatory effect of 1alpha,25-dihydroxyvitamin D(3) in human coronary arterial endothelial cells: Implication for the treatment of Kawasaki disease. *J Steroid Biochem Mol Biol*. 2009 Jan;113(1-2):134-8.
  32. Tan X, Essengue S, Talreja J, Reese J, Stechschulte DJ, Dileepan KN. Histamine directly and synergistically with lipopolysaccharide stimulates cyclooxygenase-2 expression and prostaglandin I(2) and E(2) production in human coronary artery endothelial cells. *J Immunol*. 2007 Dec 1;179(11):7899-906.
  33. Ulfhammer E, Ridderstråle W, Andersson M, Karlsson L, Hrafnkelsdóttir T, Jern S. Prolonged cyclic strain impairs the fibrinolytic system in cultured vascular endothelial cells. *J Hypertens*. 2005; 23(8): 1551-7.
  34. Voisard R, Osswald M, Baur R, Jakob U, Susa M, Mattfeldt T, Hemmer W, Hannekum A, Koenig W, Hombach V. Expression of intercellular adhesion molecule-1 in human coronary endothelial and smooth muscle cells after stimulation with tumor necrosis factor-alpha. *Coron Artery Dis*. 1998; 9(11): 737-45.
  35. Voisard R, Wiegmann D, Baur R, Hombach V, Kamenz J. Low-dose irradiation stimulates TNF-alpha-induced ICAM-1 mRNA expression in human coronary vascular cells. *Med Sci Monit*. 2007 May;13(5):BR107-11.
  36. Voisard R, Zellmann S, Müller F, Fahlisch F, von Müller L, Baur R, Braun J, Gschwendt J, Kountides M, Hombach V, Kamenz J. Sirolimus inhibits key events of restenosis in vitro/ex vivo: evaluation of the clinical relevance of the data by SI/MPL- and SI/DES-ratios. *BMC Cardiovasc Disord*. 2007 May 11;7:15.
  37. Walters S, Rodrigues P, Bélanger M, Whitlock J, Progulske-Fox A. Analysis of a band 7/MEC-2 family gene of *Porphyromonas gingivalis*. *J Dent Res*. 2009 Jan;88(1):34-8.
  38. White MC, McHowat J. Protease activation of calcium-independent phospholipase A2 leads to neutrophil recruitment to coronary artery endothelial cells. *Thromb Res*. 2007;120(4):597-605.
  39. White MC, Rastogi P, McHowat J. Lysoplasmenecholone increases neutrophil adherence to human coronary artery endothelial cells. *Am J Physiol Cell Physiol*. 2007 Nov;293(5):C1467-71.
  40. Yuan L, Rodrigues PH, Bélanger M, Dunn WA Jr, Progulske-Fox A. *Porphyromonas gingivalis* htrA is involved in cellular invasion

and in vivo survival. *Microbiology*. 2008 Apr;154(Pt 4):1161-9.

41. Zhang H, Kusunose J, Kheirrolomoom A, Seo JW, Qi J, Watson KD, Lindfors HA, Ruoslahti E, Sutcliffe JL, Ferrara KW. Dynamic imaging of arginine-rich heart-targeted vehicles in a mouse model. *Biomaterials*. 2008 Apr;29(12):1976-88.
42. Zhao R, Shen GX. Involvement of heat shock factor-1 in glycated LDL-induced upregulation of plasminogen activator inhibitor-1 in vascular endothelial cells. *Diabetes*. 2007 May;56(5):1436-44.

## HIAEC

1. Chan GC, Fish JE, Mawji IA, Leung DD, Rachlis AC, Marsden PA. Epigenetic basis for the transcriptional hyporesponsiveness of the human inducible nitric oxide synthase gene in vascular endothelial cells. *J Immunol*. 2005 Sep 15;175(6):3846-61.
2. Tan CM, McDonald CG, Chorazyczewski J, Burry AF, Feldman RD. Vanadate stimulation of adenylyl cyclase: an index of tyrosine kinase vascular effects. *Clin Pharmacol Ther*. 1999 Sep;66(3):275-81.
3. Yu X, Zhan X, D'Costa J, Tanavde VM, Ye Z, Peng T, Malehorn MT, Yang X, Civin CI, Cheng L. Lentiviral vectors with two independent internal promoters transfer high-level expression of multiple transgenes to human hematopoietic stem-progenitor cells. *Mol Ther*. 2003 Jun;7(6):827-38.
4. Yuan K, Lin MT. The roles of vascular endothelial growth factor and angiopoietin-2 in the regression of pregnancy pyogenic granuloma. *Oral Dis*. 2004 May;10(3):179-85.

## HPAEC<sup>+</sup>

1. Arce FT, Whitlock JL, Birukova AA, Birukov KG, Arnsdorf MF, Lal R, Garcia JG, Dudek SM. Regulation of the micromechanical properties of pulmonary endothelium by S1P and thrombin: role of cortactin. *Biophys J*. 2008 Jul;95(2):886-94.
2. Berdyshev EV, Gorshkova IA, Usatyuk P, Zhao Y, Saatian B, Hubbard W, Natarajan V. De novo biosynthesis of dihydrosphingosine-1-phosphate by sphingosine kinase 1 in mammalian cells. *Cellular Signalling*. 2006; 18(10): 1779-92.

3. Birukova AA, Adyshev D, Gorshkov B, Bokoch GM, Birukov KG, Verin AD. GEF-H1 is involved in agonist-induced human pulmonary endothelial barrier dysfunction. *Am J Physiol Lung Cell Mol Physiol*. 2006; 290(3):L540-8.
4. Birukova AA, Alekseeva E, Mikaelyan A, Birukov KG. HGF attenuates thrombin-induced endothelial permeability by Tiam1-mediated activation of the Rac pathway and by Tiam1/Rac-dependent inhibition of the Rho pathway. *FASEB J*. 2007 Sep;21(11):2776-86.
5. Birukova AA, Fu P, Chatchavalvanich S, Burdette D, Oskolkova O, Bochkov VN, Birukov KG. Polar head groups are important for barrier-protective effects of oxidized phospholipids on pulmonary endothelium. *Am J Physiol Lung Cell Mol Physiol*. 2007 Apr;292(4):L924-35.
6. Birukova AA, Malyukova I, Poroyko V, Birukov KG. Paxillin-beta-catenin interactions are involved in Rac/Cdc42-mediated endothelial barrier-protective response to oxidized phospholipids. *Am J Physiol Lung Cell Mol Physiol*. 2007 Jul;293(1):L199-211.
7. Birukova AA, Smurova K, Birukov KG, Kaibuchi K, Garcia JG, Verin AD. Role of Rho GTPases in thrombin-induced lung vascular endothelial cells barrier dysfunction. *Microvasc Res*. 2004 Jan;67(1):64-77.
8. Birukova AA, Smurova K, Birukov KG, Usatyuk P, Liu F, Kaibuchi K, Ricks-Cord A, Natarajan V, Alieva I, Garcia JG, Verin AD. Microtubule disassembly induces cytoskeletal remodeling and lung vascular barrier dysfunction: role of Rho-dependent mechanisms. *J Cell Physiol*. 2004 Oct;201(1):55-70.
9. Birukova AA, Zagranichnaya T, Fu P, Alekseeva E, Chen W, Jacobson JR, Birukov KG. Prostaglandins PGE(2) and PGI(2) promote endothelial barrier enhancement via PKA- and Epac1/Rap1-dependent Rac activation. *Exp Cell Res*. 2007 Jul 1;313(11):2504-20.
10. Bogatcheva NV, Adyshev D, Mambetsariev B, Moldobaeva N, Verin AD. Involvement of microtubules, p38, and Rho kinases pathway in 2-methoxyestradiol-induced lung vascular barrier dysfunction. *Am J Physiol Lung Cell Mol Physiol*. 2007;292(2):L487-99.

11. Bogatcheva NV, Wang P, Birukova AA, Verin AD, Garcia JG. Mechanism of fluoride-induced MAP kinase activation in pulmonary artery endothelial cells. *Am J Physiol Lung Cell Mol Physiol*. 2006 Jun;290(6):L1139-45.
12. Chaudhuri A, Rodriguez M, Zbrzezna V, Luo H, Pogo AO, Banerjee D. Induction of Duffy gene (FY) in human endothelial cells and in mouse. *Cytokine*. 2003 Feb 7;21(3):137-48.
13. Cullen VC, Mackarel AJ, Hislip SJ, O'Connor CM, Keenan AK. Investigation of vascular endothelial growth factor effects on pulmonary endothelial monolayer permeability and neutrophil transmigration. *Gen Pharmacol*. 2000 Sep;35(3):149-57.
14. Cutaia M, Tollefson K, Kroczyński J, Parks N, Rounds S. Role of the Na/H antiport in pH-dependent cell death in pulmonary artery endothelial cells. *Am J Physiol Lung Cell Mol Physiol*. 2000 Mar;278(3):L536-44.
15. Dudek SM, Camp SM, Chiang ET, Singleton PA, Usatyuk PV, Zhao Y, Natarajan V, Garcia JG. Pulmonary endothelial cell barrier enhancement by FTY720 does not require the S1P1 receptor. *Cell Signal*. 2007 Aug;19(8):1754-64.
16. Ellis CA, Malik AB, Gilchrist A, Hamm H, Sandoval R, Voyno-Yasenetskaya T, Tiruppathi C. Thrombin induces proteinase-activated receptor-1 gene expression in endothelial cells via activation of Gi-linked Ras/mitogen-activated protein kinase pathway. *J Biol Chem*. 1999 May 7;274(19):13718-27.
17. Ellis CA, Tiruppathi C, Sandoval R, Niles WD, Malik AB. Time course of recovery of endothelial cell surface thrombin receptor (PAR-1) expression. *Am J Physiol*. 1999 Jan;276(1 Pt 1):C38-45.
18. Finigan JH, Dudek SM, Singleton PA, Chiang ET, Jacobson JR, Camp SM, Ye SQ, Garcia JG. Activated protein C mediates novel lung endothelial barrier enhancement: role of sphingosine 1-phosphate receptor transactivation. *J Biol Chem*. 2005 Apr 29;280(17):17286-93.
19. Gorshkova I, He D, Berdyshev E, Usatyuk P, Burns M, Kalari S, Zhao Y, Pendyala S, Garcia JG, Pyne NJ, Brindley DN, Natarajan V. Protein kinase C-epsilon regulates sphingosine 1-phosphate-mediated migration of human lung endothelial cells through activation of phospholipase D2, protein kinase C-zeta, and Rac1. *J Biol Chem*. 2008 Apr 25;283(17):11794-806.
20. Grigoryev DN, Ma SF, Irizarry RA, Ye SQ, Quackenbush J, Garcia JG. Orthologous gene-expression profiling in multi-species models: search for candidate genes. *Genome Biol*. 2004;5(5):R34.
21. Hashimoto S, Gon Y, Asai Y, Asai Y, Machino T, Jibiki I, Takeshita I, Anazawa H, Horie T. p38 MAP kinase regulates RANTES production by TNF-alpha-stimulated human pulmonary vascular endothelial cells. *Allergy*. 1999 Nov;54(11):1168-72.
22. Hashimoto S, Gon Y, Matsumoto K, Takeshita I, Asai Y, Asai Y, Machino T, Horie T. Regulation by intracellular glutathione of TNF-alpha-induced p38 MAP kinase activation and RANTES production by human pulmonary vascular endothelial cells. *Allergy*. 2000 May;55(5):463-9.
23. Healy AM, Schwartz JJ, Zhu X, Herrick BE, Varnum B, Farber HW. Gas 6 promotes Axl-mediated survival in pulmonary endothelial cells. *Am J Physiol Lung Cell Mol Physiol*. 2001 Jun;280(6):L1273-81.
24. Hecquet CM, Ahmmed GU, Vogel SM, Malik AB. Role of TRPM2 channel in mediating H2O2-induced Ca2+ entry and endothelial hyperpermeability. *Circ Res*. 2008 Feb 15;102(3):347-55.
25. Huang S, Chen CS, Ingber DE. Control of cyclin D1, p27 kip1, and cell cycle progression in human capillary endothelial cells by cell shape and cytoskeletal tension. *Mol Biol Cell*. 1998; 9: 3179-93.
26. Idris I, Gray S, Donnelly R. Rosiglitazone and pulmonary oedema: an acute dose-dependent effect on human endothelial cell permeability. *Diabetologia*. 2003 Feb;46(2):288-90.
27. Jacobson JR, Dudek SM, Birukov KG, Ye SQ, Grigoryev DN, Girgis RE, Garcia JG. Cytoskeletal activation and altered gene expression in endothelial barrier regulation by simvastatin. *Am J Respir Cell Mol Biol*. 2004 May;30(5):662-70.
28. Kawkitinarong K, Linz-McGillem L, Birukov KG, Garcia JG. Differential regulation of human lung epithelial and endothelial barrier function by thrombin. *Am J Respir Cell Mol Biol*. 2004 Nov;31(5):517-27.
29. Kim KS, Rajagopal V, Gonsalves C, Johnson C, Kalra VK. A novel role of hypoxia-inducible factor in cobalt chloride- and hypoxia-mediated expression of IL-8

- chemokine in human endothelial cells. *J Immunol.* 2006;177(10):7211-24.
30. Knight DA, Lydell CP, Zhou D, Weir TD, Schellenberg RR, Bai TR. Leukemia inhibitory factor (LIF) and LIF receptor in human lung distribution and regulation of LIF disease. *Am J Respir Cell Mol Biol.* 1999; 20: 834-41.
  31. Kolosova IA, Mirzapoiiazova T, Adyshev D, Usatyuk P, Romer LH, Jacobson JR, Natarajan V, Pearse DB, Garcia JG, Verin AD. Signaling pathways involved in adenosine triphosphate-induced endothelial cell barrier enhancement. *Circ Res.* 2005 Jul 22;97(2):115-24.
  32. Kunsch C, Luchoomun J, Chen XL, Dodd GL, Karu KS, Meng CQ, Marino EM, Olliff LK, Piper JD, Qiu FH, Sikorski JA, Somers PK, Suen KL, Thomas S, Whalen AM, Wasserman MA, Sundell CL. AGIX-4207 [2-[4-[[1-[[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetic acid], a novel antioxidant and anti-inflammatory compound: cellular and biochemical characterization of antioxidant activity and inhibition of redox-sensitive inflammatory gene expression. *J Pharmacol Exp Ther.* 2005 May;313(2):492-501.
  33. Kuwana M, Okazaki Y, Kodama H, Satoh T, Kawakami Y, Ikeda Y. Endothelial differentiation potential of human monocyte-derived multipotential cells. *Stem Cells.* 2006; 24(12):2733-43.
  34. Lamé MW, Jones AD, Wilson DW, Segall HJ. Monocrotaline pyrrole targets proteins with and without cysteine residues in the cytosol and membranes of human pulmonary artery endothelial cells. *Proteomics.* 2005 Nov;5(17):4398-413.
  35. Li L, Zhang J, Jin B, Block ER, Patel JM. Nitric oxide upregulation of caspase-8 mRNA expression in lung endothelial cells: role of JAK2/STAT-1 signaling. *Mol Cell Biochem.* 2007 Nov;305(1-2):71-7.
  36. Liu K, Chi DS, Li C, Hall HK, Milhorn DM, Krishnaswamy G. HIV-1 Tat protein-induced VCAM-1 expression in human pulmonary artery endothelial cells and its signaling. *Am J Physiol Lung Cell Mol Physiol.* 2005 Aug;289(2):L252-60.
  37. Manalo DJ, Rowan A, Lavoie T, Natarajan L, Kelly BD, Ye SQ, Garcia JGN, Semenza GL. Transcriptional regulation of vascular endothelial cell responses to hypoxia by HIF-1. *Blood.* 2005 Jan 15; 105(2): 659-69.
  38. McGlothlin JR, Gao L, Lavoie T, Simon BA, Easley RB, Ma SF, Rumala BB, Garcia JG, Ye SQ. Molecular cloning and characterization of canine pre-B-cell colony-enhancing factor. *Biochem Genet.* 2005 Apr;43(3-4):127-41.
  39. McLaughlin JN, Patterson MM, Malik AB. Protease-activated receptor-3 (PAR3) regulates PAR1 signaling by receptor dimerization. *Proc Natl Acad Sci USA.* 2007 Mar 27;104(13):5662-7.
  40. Mehta D, Ahmmed GU, Paria BC, Holinstat M, Voyno-Yasenetskaya T, Tirupathi C, Minshall RD, Malik AB. RhoA interaction with inositol 1,4,5-trisphosphate receptor and transient receptor potential channel-1 regulates Ca<sup>2+</sup> entry. Role in signaling increased endothelial permeability. *J Biol Chem.* 2003 Aug 29;278(35):33492-500.
  41. Mehta D, Tirupathi C, Sandoval R, Minshall RD, Holinstat M, Malik AB. Modulatory role of focal adhesion kinase in regulating human pulmonary arterial endothelial barrier function. *J Physiol.* 2002 Mar 15;539(Pt 3):779-89.
  42. Mirzapoiiazova T, Kolosova I, Usatyuk PV, Natarajan V, Verin AD. Diverse effects of vascular endothelial growth factor on human pulmonary endothelial barrier and migration. *Am J Physiol Lung Cell Mol Physiol.* 2006 Oct;291(4):L718-24.
  43. Mirzapoiiazova T, Kolosova IA, Romer L, Garcia JG, Verin AD. The role of caldesmon in the regulation of endothelial cytoskeleton and migration. *J Cell Physiol.* 2005 Jun;203(3):520-8.
  44. Moitra J, Evenoski C, Sammani S, Wadgaonkar R, Turner JR, Ma SF, Garcia JG. A transgenic mouse with vascular endothelial over-expression of the non-muscle myosin light chain kinase-2 isoform is susceptible to inflammatory lung injury: role of sexual dimorphism and age. *Transl Res.* 2008 Mar;151(3):141-53.
  45. Mukherjee TK, Mishra AK, Mukhopadhyay S, Hoidal JR. High concentration of antioxidants N-acetylcysteine and mitoquinone-Q induces intercellular adhesion molecule 1 and oxidative stress by increasing intracellular glutathione. *J Immunol.* 2007;178(3):1835-44.
  46. Okawa-Takatsuji M, Aotsuka S, Fujinami M, Uwatoko S, Kinoshita M, Sumiya M. Up-

- regulation of intercellular adhesion molecule-1 (ICAM-1), endothelial leucocyte adhesion molecule-1 (ELAM-1) and class II MHC molecules on pulmonary artery endothelial cells by antibodies against U1-ribonucleoprotein. *Clin Exp Immunol.* 1999 Apr;116(1):174-80.
47. Qiao J, Huang F, Lum H. PKA inhibits RhoA activation: a protection mechanism against endothelial barrier dysfunction. *Am J Physiol Lung Cell Mol Physiol.* 2003 Jun;284(6):L972-80.
48. Rahbar A, Boström L, Söderberg-Naucler C. Detection of cytotoxic CD13-specific autoantibodies in sera from patients with ulcerative colitis and Crohn's disease. *J Autoimmun.* 2006 May;26(3):155-64.
49. Rahbar A, Söderberg-Naucler C. Human cytomegalovirus infection of endothelial cells triggers platelet adhesion and aggregation. *J Virol.* 2005 Feb;79(4):2211-20.
50. Rentsendorj O, Mirzapozova T, Adyshev D, Servinsky LE, Renné T, Verin AD, Pearse DB. Role of vasodilator-stimulated phosphoprotein in cGMP-mediated protection of human pulmonary artery endothelial barrier function. *Am J Physiol Lung Cell Mol Physiol.* 2008 Apr;294(4):L686-97.
51. Rounds S, Likar LL, Harrington EO, Kim KC, Smeglin A, Heins K, Parks N. Nucleotide-induced PMN adhesion to cultured epithelial cells: possible role of MUC1 mucin. *Am J Physiol.* 1999 Nov;277(5 Pt 1):L874-80.
52. Sehrawat S, Cullere X, Patel S, Italiano J Jr, Mayadas TN. Role of epac1, an exchange factor for rap GTPases, in endothelial microtubule dynamics and barrier function. *Mol Biol Cell.* 2008 Mar;19(3):1261-70.
53. Sheikh AY, Chun HJ, Glassford AJ, Kundu RK, Kutschka I, Ardigo D, Hendry SL, Wagner RA, Chen MM, Ali ZA, Yue P, Huynh DT, Connolly AJ, Pelletier MP, Tsao PS, Robbins RC, Quertermous T. In vivo genetic profiling and cellular localization of apelin reveals a hypoxia-sensitive, endothelial-centered pathway activated in ischemic heart failure. *Am J Physiol Heart Circ Physiol.* 2008 Jan;294(1):H88-98.
54. Shikata Y, Birukov KG, Garcia JG. S1P induces FA remodeling in human pulmonary endothelial cells: role of Rac, GIT1, FAK, and paxillin. *J Appl Physiol.* 2003 Mar;94(3):1193-203.
55. Skarman PJ, Rahbar A, Xie X, Söderberg-Naucler C. Induction of polymorphonuclear leukocyte response by human cytomegalovirus. *Microbes Infect.* 2006 May;8(6):1592-601.
56. Southwood M, Jeffery TK, Yang X, Upton PD, Hall SM, Atkinson C, Haworth SG, Stewart S, Reynolds PN, Long L, Trembath RC, Morrell NW. Regulation of bone morphogenetic protein signalling in human pulmonary vascular development. *J Pathol.* 2008 Jan;214(1):85-95.
57. Tar K, Birukova AA, Csontos C, Bakó E, Garcia JG, Verin AD. Phosphatase 2A is involved in endothelial cell microtubule remodeling and barrier regulation. *J Cell Biochem.* 2004 Jun 1;92(3):534-46.
58. Teckchandani AM, Birukova AA, Tar K, Verin AD, Tsygankov AY. The multidomain protooncogenic protein c-Cbl binds to tubulin and stabilizes microtubules. *Exp Cell Res.* 2005 May 15;306(1):114-27.
59. Terminella C, Tollefson K, Kroczyński J, Pelli J, Cutaia M. Inhibition of apoptosis in pulmonary endothelial cells by altered pH, mitochondrial function, and ATP supply. *Am J Physiol Lung Cell Mol Physiol.* 2002 Dec;283(6):L1291-302.
60. Thibonnier M, Conarty DM, Preston JA, Plesnicher CL, Dweik RA, Erzurum SC. Human vascular endothelial cells express oxytocin receptors. *Endocrinology.* 1999 Mar;140(3):1301-9.
61. Thickett DR, Armstrong L, Christie SJ, Millar AB. Vascular endothelial growth factor may contribute to increased vascular permeability in acute respiratory distress syndrome. *Am J Respir Crit Care Med.* 2001 Nov 1;164(9):1601-5.
62. Upton PD, Long L, Trembath RC, Morrell NW. Functional characterization of bone morphogenetic protein binding sites and Smad1/5 activation in human vascular cells. *Mol Pharmacol.* 2008 Feb;73(2):539-52.
63. Walker JL, Loscalzo J, Zhang YY. 5-Lipoxygenase and human pulmonary artery endothelial cell proliferation. *Am J Physiol Heart Circ Physiol.* 2002 Feb;282(2):H585-93.
64. Yang Z, Li JC. Stimulation of endothelin-1 gene expression by insulin via phosphoinositide-3 kinase-glycogen synthase kinase-3beta signaling in endothelial cells. *Life Sci.* 2008 Feb 27;82(9-10):512-8.

65. Zhou X, Perez F, Han K, Jurivich DA. Clonal senescence alters endothelial ICAM-1 function. *Mech Ageing Dev.* 2006 Oct;127(10):779-85.
66. Zoeller RA, Grazia TJ, LaCamera P, Park J, Gaposchkin DP, Farber HW. Increasing plasmalogen levels protects human endothelial cells during hypoxia. *Am J Physiol Heart Circ Physiol.* 2002 Aug;283(2):H671-9.
7. Keshi H, Sakamoto T, Kawai T, Ohtani K, Katoh T, Jang SJ, Motomura W, Yoshizaki T, Fukuda M, Koyama S, Fukuzawa J, Fukuoh A, Yoshida I, Suzuki Y, Wakamiya N. Identification and characterization of a novel human collectin CL-K1. *Microbiol Immunol.* 2006;50(12):1001-13.
8. Kiyono M, Shibuya M. Inhibitory Smad transcription factors protect arterial endothelial cells from apoptosis induced by BMP4. *Oncogene.* 2006 Nov 16;25(54):7131-7.
9. Koynova R, Wang L, MacDonald RC. Synergy in lipofection by cationic lipid mixtures: superior activity at the gel-liquid crystalline phase transition. *J Phys Chem B.* 2007 Jul 12;111(27):7786-95.
10. Osada M, Imaoka S, Funae Y. Apigenin suppresses the expression of VEGF, an important factor for angiogenesis, in endothelial cells via degradation of HIF-1alpha protein. *FEBS Lett.* 2004 Sep 24;575(1-3):59-63.
11. Pendergraft WF, Alcorta DA, Segelmark M, Yang JJ, Tuttle R, Jennette JC, Falk RJ, Preston GA. ANCA antigens, proteinase 3 and myeloperoxidase, are not expressed in endothelial cells. *Kidney Int.* 2000 May;57(5):1981-90.
12. Schaubert CA, Tuerk MJ, Pacheco CD, Escarpe PA, Veres G. Lentiviral vectors pseudotyped with baculovirus gp64 efficiently transduce mouse cells in vivo and show tropism restriction against hematopoietic cell types in vitro. *Gene Ther.* 2004 Feb;11(3):266-75.
13. Suzuki S, Oguro A, Osada-Oka M, Funae Y, Imaoka S. Epoxyeicosatrienoic acids and/or their metabolites promote hypoxic response of cells. *J Pharmacol Sci.* 2008 Sep;108(1):79-88.
14. Wang L, Koynova R, Parikh H, MacDonald RC. Transfection activity of binary mixtures of cationic o-substituted phosphatidylcholine derivatives: the hydrophobic core strongly modulates physical properties and DNA delivery efficacy. *Biophys J.* 2006 Nov 15;91(10):3692-706.

## HUAEC

1. Akino K, Mineda T, Akita S. Early cellular changes of human mesenchymal stem cells and their interaction with other cells. *Wound Repair Regen.* 2005 Jul-Aug;13(4):434-40.
2. Albert DH, Tapang P, Magoc TJ, Pease LJ, Reuter DR, Wei RQ, Li J, Guo J, Bousquet PF, Ghoreishi-Haack NS, Wang B, Bukofzer GT, Wang YC, Stavropoulos JA, Hartandi K, Niquette AL, Soni N, Johnson EF, McCall JO, Bouska JJ, Luo Y, Donawho CK, Dai Y, Marcotte PA, Glaser KB, Michaelides MR, Davidsen SK. Preclinical activity of ABT-869, a multitargeted receptor tyrosine kinase inhibitor. *Mol Cancer Ther.* 2006 Apr;5(4):995-1006.
3. Annas A, Granberg AL, Brittebo EB. Differential response of cultured human umbilical vein and artery endothelial cells to Ah receptor agonist treatment: CYP-dependent activation of food and environmental mutagens. *Toxicol Appl Pharmacol.* 2000 Nov 15;169(1):94-101.
4. Beleslin-Cokic BB, Cokic VP, Yu X, Weksler BB, Schechter AN, Noguchi CT. Erythropoietin and hypoxia stimulate erythropoietin receptor and nitric oxide production by endothelial cells. *Blood.* 2004 Oct 1;104(7):2073-80.
5. Fortin MC, Raymond MA, Madore F, Fugère JA, Pâquet M, St-Louis G, Hébert MJ. Increased risk of thrombotic microangiopathy in patients receiving a cyclosporin-sirolimus combination. *Am J Transplant.* 2004 Jun;4(6):946-52.
6. Husain SR, Gill P, Kreitman RJ, Pastan I, Puri RK. Interleukin-4 receptor expression on AIDS-associated Kaposi's sarcoma cells and their targeting by a chimeric protein comprised of circularly permuted interleukin-4 and *Pseudomonas* exotoxin. *Mol Med.* 1997 May;3(5):327-38.

## HUVEC<sup>+</sup>

1. Andersson I, Lundkvist A, Haller O, Mirazimi A. Type I interferon inhibits Crimean-Congo hemorrhagic fever virus in human target cells. *J Med Virol.* 2006;78(2):216-22.

2. Bainbridge BW, Coats SR, Pham TT, Reife RA, Darveau RP. Expression of a Porphyromonas gingivalis lipid A palmitylacyltransferase in Escherichia coli yields a chimeric lipid A with altered ability to stimulate interleukin-8 secretion. *Cell Microbiol.* 2006; 8(1):120-9.
3. Béliveau R, Gingras D, Kruger EA, Lamy S, Sirois P, Simard B, Sirois MG, Tranquil L, Baffert F, Beaulieu É, Dimitriadou V, Pépin, M-C, Courjal F, Ricard I, Poyet P, Falardeau P, Figg WD, Dupont É. The antiangiogenic agent neovastat (Æ-941) inhibits vascular endothelial growth factor-mediated biological effects. *Clin Canc Res.* 2002 Apr; 8: 1242-50.
4. Ben-Chetrit E, Bergmann S, Sood R. Mechanism of the anti-inflammatory effect of colchicine in rheumatic diseases: a possible new outlook through microarray analysis. *Rheumatology (Oxford).* 2006; 45(3):274-82.
5. Benny O, Fainaru O, Adini A, Cassiola F, Bazinet L, Adini I, Pravda E, Nahmias Y, Koirala S, Corfas G, D'Amato RJ, Folkman J. An orally delivered small-molecule formulation with antiangiogenic and anticancer activity. *Nat Biotechnol.* 2008 Jul;26(7):799-807.
6. Bernier SG, Lazarus DD, Clark E, Doyle B, Labenski MT, Thompson CD, Westlin WF, Hannig G. A methionine aminopeptidase-2 inhibitor, PPI-2458, for the treatment of rheumatoid arthritis. *PNAS.* 2004 Jul 20; 101(29): 10768-73.
7. Biron KK, Harvey RJ, Chamberlain SC, Good SS, Smith III AA, Davis MG, Talarico CL, Miller WH, Ferris R, Dornsife RE, Stanat SC, Drach JC, Townsend LB, Koszalka GW. Potent and selective inhibition of human cytomegalovirus replication by 1263W94, a benzimidazole L-riboside with a unique mode of action. *Antimicro Agents Chemother.* 2002 Aug; 46(8): 2365-72.
8. Blume C, Benz PM, Walter U, Ha J, Kemp BE, Renné T. AMP-activated protein kinase impairs endothelial actin cytoskeleton assembly by phosphorylating vasodilator-stimulated phosphoprotein. *J Biol Chem.* 2007; 282(7): 4601-12.
9. Bode-Böger SM, Scalera F, Kielstein JT, Martens-Lobenhoffer J, Breithardt G, Fobker M, Reinecke H. Symmetrical dimethylarginine: a new combined parameter for renal function and extent of coronary artery disease. *J Am Soc Nephrol.* 2006;17(4):1128-34.
10. Breslin JW, Yuan SY, Wu MH. VEGF-C alters barrier function of cultured lymphatic endothelial cells through a VEGFR-3-dependent mechanism. *Lymphat Res Biol.* 2007;5(2):105-13.
11. Brodsky SV, Merks RM, Mendeleev N, Goo C, Chen J. Glycated Collagen I (GC) impairs angiogenesis in vitro: a study using an innovative chamber for cell research. *Diabetes Res Clin Pract.* 2007 Jun;76(3):463-7.
12. Browne CD, Hindmarsh EJ, Smith JW. Inhibition of endothelial cell proliferation and angiogenesis by orlistat, a fatty acid synthase inhibitor. *FASEB J.* 2006; 20(12):2027-35.
13. Bryant AE, Bayer CR, Aldape MJ, Wallace RJ, Titball RW, Stevens DL. Clostridium perfringens phospholipase C-induced platelet/leukocyte interactions impede neutrophil diapedesis. *J Med Microbiol.* 2006; 55(Pt 5):495-504
14. Burgess T, Coxon A, Meyer S, Sun J, Rex K, Tsuruda T, Chen Q, Ho SY, Li L, Kaufman S, McDorman K, Cattley RC, Sun J, Elliott G, Zhang K, Feng X, Jia XC, Green L, Radinsky R, Kendall R. Fully human monoclonal antibodies to hepatocyte growth factor with therapeutic potential against hepatocyte growth factor/c-Met-dependent human tumors. *Cancer Res.* 2006; 66(3): 1721-9.
15. Camp JP, Stokol T, Shuler ML. Fabrication of a multiple-diameter branched network of microvascular channels with semi-circular cross-sections using xenon difluoride etching. *Biomed Microdevices.* 2008 Apr;10(2):179-86.
16. Campbell CL, Sacarese DMF, Quesenberry PJ, Savarese TM. Expression on multiple angiogenic cytokines in cultured normal human prostate epithelial cells: predominance of vascular endothelial growth factor. *Int J Canc.* 1999; 80: 868-74.
17. Cao G, O'Brien CD, Zhou Z, Sanders SM, Greenbaum JN, Makrigiannakis A, DeLisser HM. Involvement of human PECAM-1 in angiogenesis and in vitro endothelial cell migration. *Am J Physiol Cell Physiol.* 2002; 282: C1181-90.
18. Cao ZA, Bass KE, Balasubramanian S, Liu L, Schultz B, Verner E, Dai Y, Molina RA, Davis JR, Misialek S, Sendzik M, Orr CJ,

- Leung L, Callan O, Young P, Dalrymple SA, Buggy JJ. CRA-026440: a potent, broad-spectrum, hydroxamic histone deacetylase inhibitor with antiproliferative and antiangiogenic activity in vitro and in vivo. *Mol Cancer Ther.* 2006; 5(7):1693-701.
19. Chan T-M, Leung JK-H, Ho S K-N, Yung S. Mesangial cell-binding anti-DNA antibodies in patients with systemic lupus erythematosus. *J Am Soc Nephrol.* 2002; 13: 1219-29.
  20. Chang F, Re F, Sebastian S, Sazer S, Luban J. HIV-1 Vpr induces defects in mitosis, cytokinesis, nuclear structure, and centrosomes. *Mol Biol Cell.* 2004 Apr; 15: 1793-801.
  21. Chavakis E, Carmona G, Urbich C, Göttig S, Henschler R, Penninger JM, Zeiher AM, Chavakis T, Dimmeler S. Phosphatidylinositol-3-kinase-gamma is integral to homing functions of progenitor cells. *Circ Res.* 2008 Apr 25;102(8):942-9.
  22. Chen C, Coats SR, Bumgarner RE, Darveau RP. Hierarchical gene expression profiles of HUVEC stimulated by different lipid A structures obtained from *Porphyromonas gingivalis* and *Escherichia coli*. *Cell Microbiol.* 2007 Apr;9(4):1028-38.
  23. Cheng N, Brantley DM, Liu H, Lin Q, Enriquez M, Gale N, Yancopoulos G, Cerretti DP, Daniel TO, Chen J. Blockade of EphA receptor tyrosine kinase activation inhibits vascular endothelial cell growth factor-induced angiogenesis. *AACR.* 2002; 1: 2-11.
  24. Clerin V, Shih HH, Deng N, Hebert G, Resmini C, Shields KM, Feldman JL, Winkler A, Albert L, Maganti V, Wong A, Paulsen JE, Keith JC Jr, Vlasuk GP, Pittman DD. Expression of the cysteine protease legumain in vascular lesions and functional implications in atherogenesis. *Atherosclerosis.* 2008 Feb 21. [Epub ahead of print]
  25. Cui R, Takahashi F, Ohashi R, Gu T, Yoshioka M, Nishio K, Ohe Y, Tominaga S, Takagi Y, Sasaki S, Fukuchi Y, Takahashi K. Abrogation of the interaction between osteopontin and alpha5beta3 integrin reduces tumor growth of human lung cancer cells in mice. *Lung Cancer.* 2007 Sep;57(3):302-10.
  26. Curtis SB, Hewitt J, Yakubovitz S, Anzarut A, Hsiang YN, Buchan AMJ. Somatostatin receptor subtype expression and function in human vascular tissue. *Am J Physiol Heart Circ Physiol.* 2000; 278: H1815-22.
  27. da Silva CG, Jarzyna R, Specht A, Kaczmarek E. Extracellular nucleotides and adenosine independently activate AMP-activated protein kinase in endothelial cells: involvement of P2 receptors and adenosine transporters. *Circ Res.* 2006; 98(5):e39-47.
  28. Daouti S, Li WH, Qian H, Huang KS, Holmgren J, Levin W, Reik L, McGady DL, Gillespie P, Perrotta A, Bian H, Reidhaar-Olson JF, Bliss SA, Olivier AR, Sergi JA, Fry D, Danho W, Ritland S, Fotouhi N, Heimbrook D, Niu H. A selective phosphatase of regenerating liver phosphatase inhibitor suppresses tumor cell anchorage-independent growth by a novel mechanism involving p130Cas cleavage. *Cancer Res.* 2008 Feb 15;68(4):1162-9.
  29. Dawson NS, Zawieja DC, Wu MH, Granger HJ. Signaling pathways mediating VEGF165-induced calcium transients and membrane depolarization in human endothelial cells. *FASEB J.* 2006; 20(7):991-3. Epub 2006 Mar 31.
  30. Ding YH, Li J, Yao WX, Rafols JA, Clark JC, Ding Y. Exercise preconditioning upregulates cerebral integrins and enhances cerebrovascular integrity in ischemic rats. *Acta Neuropathol (Berl).* 2006;112(1):74-84.
  31. Dufourcq P, Leroux L, Ezan J, Descamps B, Lamazière JM, Costet P, Basoni C, Moreau C, Deutsch U, Couffinhal T, Duplâa C. Regulation of endothelial cell cytoskeletal reorganization by a secreted frizzled-related protein-1 and frizzled 4- and frizzled 7-dependent pathway: role in neovessel formation. *Am J Pathol.* 2008 Jan;172(1):37-49.
  32. Dziubla TD, Shuvaev VV, Hong NK, Hawkins BJ, Madesh M, Takano H, Simone E, Nakada MT, Fisher A, Albelda SM, Muzykantov VR. Endothelial targeting of semi-permeable polymer nanocarriers for enzyme therapies. *Biomaterials.* 2008 Jan;29(2):215-27.
  33. Fang Y, Olah ME. Cyclic AMP-dependent, protein kinase A-independent activation of extracellular signal-regulated kinase 1/2 following adenosine receptor stimulation in human umbilical vein endothelial cells: role of exchange protein activated by cAMP 1 (Epac1). *J Pharmacol Exp Ther.* 2007 Sep;322(3):1189-200.



34. Fasanaro P, D'Alessandra Y, Di Stefano V, Melchionna R, Romani S, Pompilio G, Capogrossi MC, Martelli F. MicroRNA-210 modulates endothelial cell response to hypoxia and inhibits the receptor tyrosine kinase ligand Ephrin-A3. *J Biol Chem.* 2008 Jun 6;283(23):15878-83.
35. Ferguson GD, Jensen-Pergakes K, Wilkey C, Jhaveri U, Richard N, Verhelle D, De Parseval LM, Corral LG, Xie W, Morris CL, Brady H, Chan K. Immunomodulatory drug CC-4047 is a cell-type and stimulus-selective transcriptional inhibitor of cyclooxygenase 2. *J Clin Immunol.* 2007; 27(2):210-20.
36. Fernando NT, Koch M, Rothrock C, Gollogly LK, D'Amore PA, Ryeom S, Yoon SS. Tumor escape from endogenous, extracellular matrix-associated angiogenesis inhibitors by up-regulation of multiple proangiogenic factors. *Clin Cancer Res.* 2008 Mar 1;14(5):1529-39.
37. Finnegan EM, Turhan A, Golan DE, Barabino GA. Adherent leukocytes capture sickle erythrocytes in an in vitro flow model of vaso-occlusion. *Am J Hematol.* 2007; 82(4): 266-75.
38. Folkins C, Man S, Xu P, Shaked Y, Hicklin DJ, Kerbel RS. Anticancer therapies combining antiangiogenic and tumor cell cytotoxic effects reduce the tumor stem-like cell fraction in glioma xenograft tumors. *Cancer Res.* 2007 Apr 15;67(8):3560-4.
39. Frau E, Magnon C, Opolon P, Connault E, Opolon D, Beermann F, Abitbol M, Perricaudet M, Bouquet C. A gene transfer comparative study of HSA-conjugated antiangiogenic factors in a transgenic mouse model of metastatic ocular cancer. *Cancer Gene Ther.* 2007;14(3):251-61.
40. Friis T, Engel A-M, Klein BM, Rygaard J, Houen G. Levamisole inhibits angiogenesis in vitro and tumor growth in vivo. *Angiogen.* 2005 Mar; 8(1): 25-34.
41. Fritz-Six KL, Dunworth WP, Li M, Caron KM. Adrenomedullin signaling is necessary for murine lymphatic vascular development. *J Clin Invest.* 2008 Jan;118(1):40-50.
42. Garton AJ, Crew AP, Franklin M, Cooke AR, Wynne GM, Castaldo L, Kahler J, Winski SL, Franks A, Brown EN, Bittner MA, Keily JF, Briner P, Hidden C, Srebernak MC, Pirrit C, O'Connor M, Chan A, Vulevic B, Henninger D, Hart K, Sennello R, Li AH, Zhang T, Richardson F, Emerson DL, Castelhana AL, Arnold LD, Gibson NW. OSI-930: a novel selective inhibitor of Kit and kinase insert domain receptor tyrosine kinases with antitumor activity in mouse xenograft models. *Cancer Res.* 2006; 66(2):1015-24.
43. Gavrilovskaya IN, Gorbunova EE, Mackow NA, Mackow ER. Hantaviruses direct endothelial cell permeability by sensitizing cells to the vascular permeability factor VEGF, while angiopoietin 1 and sphingosine 1-phosphate inhibit hantavirus-directed permeability. *J Virol.* 2008 Jun;82(12):5797-806.
44. Geng L, Cuneo KC, Cooper MK, Wang H, Sekhar K, Fu A, Hallahan DE. Hedgehog signaling in the murine melanoma microenvironment. *Angiogenesis.* 2007;10(4):259-67.
45. Gilbertson DG, Duff ME, West JW, Kelly JD, Sheppard PO, Hofstrand PD, Gao Z, Shoemaker K, Bukowski TR, Moore M, Feldhaus AL, Humes JM, Palmer TE, Hart CE. Platelet-derived growth factor C (PDGF-C), a novel growth factor that binds to PDGF- $\alpha$  and  $\beta$  receptor. *J Biol Chem.* 2001 Jul 20; 276(29): 27408-14.
46. Gingras D, Michaud M, Di Tomasso G, Béliveau E, Nyalendo C, Béliveau R. Sphingosine-1-phosphate induces the association of membrane-type 1 matrix metalloproteinase with p130Cas in endothelial cells. *FEBS Lett.* 2008 Feb 6;582(3):399-404.
47. Girdhar G, Xu S, Jesty J, Bluestein D. In vitro model of platelet-endothelial activation due to cigarette smoke under cardiovascular circulation conditions. *Ann Biomed Eng.* 2008 Jul;36(7):1142-51.
48. Gollogly LK, Ryeom SW, Yoon SS. Down syndrome candidate region 1-like 1 (DSCR1-L1) mimics the inhibitory effects of DSCR1 on calcineurin signaling in endothelial cells and inhibits angiogenesis. *J Surg Res.* 2007 Sep;142(1):129-36. *Epub* 2007 Jul 5.
49. Grossmann C, Ganem D. Effects of NFkappaB activation on KSHV latency and lytic reactivation are complex and context-dependent. *Virology.* 2008 May 25;375(1):94-102.
50. Guo M, Breslin JW, Wu MH, Gottardi CJ, Yuan SY. VE-cadherin and beta-catenin binding dynamics during histamine-induced

- endothelial hyperpermeability. *Am J Physiol Cell Physiol.* 2008 Apr;294(4):C977-84.
51. Guo X, Evans TR, Somanath S, Armesilla AL, Darling JL, Schatzlein A, Cassidy J, Wang W. In vitro evaluation of cancer-specific NF-kappaB-CEA enhancer-promoter system for 5-fluorouracil prodrug gene therapy in colon cancer cell lines. *Br J Cancer.* 2007 Sep 17;97(6):745-54.
  52. Guo X, Ruiz A, Rando RR, Bok D, Gudas LJ. Esterification of all-trans-retinol in normal human epithelial cell strains and carcinoma lines from oral cavity, skin and breast: reduced expression of lecithin:retinol acyltransferase in carcinoma lines. 2000 Nov; 21(11): 1925-33.
  53. Halin C, Fahrngruber H, Meingassner JG, Bold G, Littlewood-Evans A, Stuetz A, Detmar M. Inhibition of chronic and acute skin inflammation by treatment with a vascular endothelial growth factor receptor tyrosine kinase inhibitor. *Am J Pathol.* 2008 Jul;173(1):265-77.
  54. Han JW, Shimada K, Ma-Krupa W, Johnson TL, Nerem RM, Goronzy JJ, Weyand CM. Vessel wall-embedded dendritic cells induce T-cell autoreactivity and initiate vascular inflammation. *Circ Res.* 2008 Mar 14;102(5):546-53.
  55. Harrington EO, Stefanec T, Newton J, Rounds S. Release of soluble E-selectin from activated endothelial cells upon apoptosis. *Lung.* 2006;184(5):259-66.
  56. Harris TA, Yamakuchi M, Ferlito M, Mendell JT, Lowenstein CJ. MicroRNA-126 regulates endothelial expression of vascular cell adhesion molecule 1. *Proc Natl Acad Sci U S A.* 2008 Feb 5;105(5):1516-21.
  57. Hawari FI, Rouhani FN, Cui X, Yu ZX, Buckley C, Kaler M, Levine SJ. Release of full-length 55-kDa TNF receptor 1 in exosome-like vesicles: a mechanism for generation of soluble cytokine receptors. *PNAS.* 2004; 101(5): 1297-302.
  58. Hecke A, Brooks H, Meryet-Figuière M, Minne S, Konstantinides S, Hasenfuss G, Lebleu B, Schäfer K. Successful silencing of plasminogen activator inhibitor-1 in human vascular endothelial cells using small interfering RNA. *Thromb Haemost.* 2006;95(5):857-64.
  59. Hendrix ND, Wu R, Kuick R, Schwartz DR, Fearon ER, Cho KR. Fibroblast growth factor 9 has oncogenic activity and is a downstream target of Wnt signaling in ovarian endometrioid adenocarcinomas. *Cancer Res.* 2006; 66(3): 1354-62.
  60. Hermans PW, Adrian PV, Albert C, Estevão S, Hoogenboezem T, Luijendijk IH, Kamphausen T, Hammerschmidt S. The streptococcal lipoprotein rotamase A (SlrA) is a functional peptidyl-prolyl isomerase involved in pneumococcal colonization. *J Biol Chem.* 2006;281(2):968-76.
  61. Hoang T, Huang S, Armstrong E, Eickhoff JC, Harari PM. Augmentation of radiation response with the vascular targeting agent ZD6126. *Int J Radiat Oncol Biol Phys.* 2006; 64(5):1458-65.
  62. Horváth EM, Benko R, Gero D, Kiss L, Szabó C. Treatment with insulin inhibits poly(ADP-ribose)polymerase activation in a rat model of endotoxemia. *Life Sci.* 2008 Jan 16;82(3-4):205-9.
  63. Hu L, Roth JM, Brooks P, Ibrahim S, Karpatkin S. Twist is required for thrombin-induced tumor angiogenesis and growth. *Cancer Res.* 2008 Jun 1;68(11):4296-302.
  64. Hu L, Roth JM, Brooks P, Luty J, Karpatkin S. Thrombin up-regulates cathepsin D which enhances angiogenesis, growth, and metastasis. *Cancer Res.* 2008 Jun 15;68(12):4666-73.
  65. Huang D, Ding Y, Luo WM, Bender S, Qian CN, Kort E, Zhang ZF, VandenBeldt K, Duesbery NS, Resau JH, Teh BT. Inhibition of MAPK kinase signaling pathways suppressed renal cell carcinoma growth and angiogenesis in vivo. *Cancer Res.* 2008 Jan 1;68(1):81-8.
  66. Huddleson JP, Ahmad N, Lingrel JB. Up-regulation of the KLF2 transcription factor by fluid shear stress requires nucleolin. *J Biol Chem.* 2006; 281(22):15121-8.
  67. Huston A, Leleu X, Jia X, Moreau AS, Ngo HT, Runnels J, Anderson J, Alsayed Y, Roccaro A, Vallet S, Hatjiharissi E, Tai YT, Sportelli P, Munshi N, Richardson P, Hideshima T, Roodman DG, Anderson KC, Ghobrial IM. Targeting Akt and heat shock protein 90 produces synergistic multiple myeloma cell cytotoxicity in the bone marrow microenvironment. *Clin Cancer Res.* 2008 Feb 1;14(3):865-74.
  68. Imaizumi T, Mechti N, Matsumiya T, Sakaki H, Kubota K, Yoshida H, Kimura H, Satoh K. Expression of interferon-stimulated gene 20 in vascular endothelial cells. *Microbiol Immunol.* 2008;52(1):30-5.

69. Isenberg JS, Jia Y, Field L, Ridnour LA, Sparatore A, Del Soldato P, Sowers AL, Yeh GC, Moody TW, Wink DA, Ramchandran R, Roberts DD. Modulation of angiogenesis by dithiolethione-modified NSAIDs and valproic acid. *Br J Pharmacol*. 2007 May;151(1):63-72.
70. Isenberg JS, Pappan LK, Romeo MJ, Abu-Asab M, Tsokos M, Wink DA, Frazier WA, Roberts DD. Blockade of thrombospondin-1-CD47 interactions prevents necrosis of full thickness skin grafts. *Ann Surg*. 2008 Jan;247(1):180-90.
71. Jaalouk DE, Ozawa MG, Sun J, Lahdenranta J, Schlingemann RO, Pasqualini R, Arap W. The original Pathologische Anatomie Leiden-Endothelium monoclonal antibody recognizes a vascular endothelial growth factor binding site within neuropilin-1. *Cancer Res*. 2007 Oct 15;67(20):9623-9.
72. Javed MJ, Mead LE, Prater D, Bessler WK, Foster D, Case J, Goebel WS, Yoder MC, Haneline LS, Ingram DA. Endothelial colony forming cells and mesenchymal stem cells are enriched at different gestational ages in human umbilical cord blood. *Pediatr Res*. 2008 Jul;64(1):68-73.
73. Kaneko H, Yu D, Miura M. Overexpression of IGF-I receptor in HeLa cells enhances in vivo radioresponse. *Biochem Biophys Res Commun*. 2007 Nov 30;363(4):937-41.
74. Kawaguchi M, Kokubu F, Matsukura S, Ieki K, Odaka M, Watanabe S, Suzuki S, Adachi M, Huang S-K. Induction of C-X-C chemokines, growth-related oncogene  $\alpha$  expression, and epithelial cell-derived neutrophils-activating protein-78 by ML-1 (Interleukin-17F) involves activation of Raf-1-mitogen-activated protein kinase kinase-extracellular signal-regulated kinase  $\frac{1}{2}$  pathway. *J Pharmacol Exp Therap*. 2003; 307(3): 1213-20.
75. Kikuchi M, Shirasaki H, Himi T. Platelet-activating factor (PAF) increases NO production in human endothelial cells-real-time monitoring by DAR-4M AM. *Prostaglandins Leukot Essent Fatty Acids*. 2008 Apr-May;78(4-5):305-9.
76. Kim CS, Son SJ, Kim EK, Kim SN, Yoo DG, Kim HS, Ryoo SW, Lee SD, Irani K, Jeon BH. Apurinic/aprimidinic endonuclease1/redox factor-1 inhibits monocyte adhesion in endothelial cells. *Cardiovasc Res*. 2006; 69(2):520-6.
77. Kim H, Chu TT, Kim DY, Kim DR, Nguyen CM, Choi J, Lee JR, Hahn MJ, Kim KK. The crystal structure of guamerin in complex with chymotrypsin and the development of an elastase-specific inhibitor. *J Mol Biol*. 2008 Feb 8;376(1):184-92.
78. Kim HK, Kim JE, Chung J, Lee DS, Han KS, Park S, Cho HI. Plasma level of stromal derived factor-1 (SDF-1) is increased in disseminated intravascular coagulation patients who have poor outcomes: in vitro effect of SDF-1 on coagulopathy. *Thromb Res*. 2007;120(4):559-66.
79. Kirstein SL, Atienza JM, Xi B, Zhu J, Yu N, Wang X, Xu X, Abassi YA. Live cell quality control and utility of real-time cell electronic sensing for assay development. *Assay Drug Dev Technol*. 2006; 4(5): 545-53.
80. Komiya K, Enomoto H, Inoki I, Okazaki S, Fujita Y, Ikeda E, Ohuchi E, Matsumoto H, Toyama Y, Okada Y. Expression of ADAM15 in rheumatoid synovium: up-regulation by vascular endothelial growth factor and possible implications for angiogenesis. *Arthritis Res Ther*. 2005;7(6):R1158-73.
81. Kukulski F, Ben Yebdri F, Lefebvre J, Warny M, Tessier PA, Sévigny J. Extracellular nucleotides mediate LPS-induced neutrophil migration in vitro and in vivo. *J Leukoc Biol*. 2007 May;81(5):1269-75.
82. Kumar R, Knick VB, Rudolph SK, Johnson JH, Crosby RM, Crouthamel MC, Hopper TM, Miller CG, Harrington LE, Onori JA, Mullin RJ, Gilmer TM, Truesdale AT, Epperly AH, Bolor A, Stafford JA, Luttrell DK, Cheung M. Pharmacokinetic-pharmacodynamic correlation from mouse to human with pazopanib, a multikinase angiogenesis inhibitor with potent antitumor and antiangiogenic activity. *Mol Cancer Ther*. 2007 Jul;6(7):2012-21.
83. Kuppuswamy M, Spencer JF, Doronin K, Tollefson AE, Wold WS, Toth K. Oncolytic adenovirus that overproduces ADP and replicates selectively in tumors due to hTERT promoter-regulated E4 gene expression. *Gene Ther*. 2005 Nov; 12(22): 1608-17.
84. Kuroda T, Rabkin SD, Martuza RL. Effective treatment of tumors with strong beta-catenin/T-cell factor activity by transcriptionally targeted oncolytic herpes simplex virus vector. *Cancer Res*. 2006; 66(20):10127-35.

85. Laan M, Prause O, Miyamoto M, Sjöstrand M, Hytönen AM, Kaneko T, Lötvall J, Lindén A. A role of GM-CSF in the accumulation of neutrophils in the airways caused by IL-17 and TNF- $\alpha$ . *Eur Respir J*. 2003; 21: 387-93.
86. Lamy S, Ruiz MT, Wisniewski J, Garde S, Rabbani SA, Panchal C, Wu JJ, Annabi S. A prostate secretory protein94-derived synthetic peptide PCK3145 inhibits VEGF signaling in endothelial cells: implication in tumor angiogenesis. *Int J Canc*. 2006; 118(9): 2350-8.
87. Lasagna N, Fantappiè O, Solazzo M, Morbidelli L, Marchetti S, Cipriani G, Ziche M, Mazzanti R. Hepatocyte growth factor and inducible nitric oxide synthase are involved in multidrug resistance-induced angiogenesis in hepatocellular carcinoma cell lines. *Cancer Res*. 2006; 66(5):2673-82.
88. Lee DY, Park K, Kim SK, Park RW, Kwon IC, Kim SY, Byun Y. Antimetastatic effect of an orally active heparin derivative on experimentally induced metastasis. *Clin Cancer Res*. 2008 May 1;14(9):2841-9.
89. Lee HY, You HJ, Won JY, Youn SW, Cho HJ, Park KW, Park WY, Seo JS, Park YB, Walsh K, Oh BH, Kim HS. Forkhead factor, FOXO3a, induces apoptosis of endothelial cells through activation of matrix metalloproteinases. *Arterioscler Thromb Vasc Biol*. 2008 Feb;28(2):302-8.
90. Lee HY, Youn SW, Kim JY, Park KW, Hwang CI, Park WY, Oh BH, Park YB, Walsh K, Seo JS, Kim HS. FOXO3a turns the tumor necrosis factor receptor signaling towards apoptosis through reciprocal regulation of c-Jun N-terminal kinase and NF-kappaB. *Arterioscler Thromb Vasc Biol*. 2008 Jan;28(1):112-20.
91. Lee JH, Chun T, Park SY, Rho SB. Interferon regulatory factor-1 (IRF-1) regulates VEGF-induced angiogenesis in HUVECs. *Biochim Biophys Acta*. 2008 Sep;1783(9):1654-62.
92. Lee JM, Jeon HB, Sohn BH, Chung IS. Functional expression of recombinant canstatin in stably transformed *Drosophila melanogaster* S2 cells. *Protein Expr Purif*. 2007 Apr;52(2):258-64.
93. Lee Z, Swaby RF, Liang Y, Yu S, Liu S, Lu KH, Bast RC, Mills GB, Fang X. Lysophosphatidic acid is a major regulator of growth-regulated oncogene alpha in ovarian cancer. *Cancer Res*. 2006; 66(5): 2740-8.
94. Leng Q, Scaria P, Lu P, Woodle MC, Mixson AJ. Systemic delivery of HK Raf-1 siRNA polyplexes inhibits MDA-MB-435 xenografts. *Cancer Gene Ther*. 2008 Aug;15(8):485-95.
95. Levenberg S, Golub JS, Amit M, Itskovitz-Eldor J, Langer R. Endothelial cells derived from human embryonic stem cells. *PNAS*. 2002; 99: 4391-6.
96. Li X, Liu YH, Lee SJ, Gardner TA, Jeng MH, Kao C. Prostate-restricted replicative adenovirus expressing human endostatin-angiostatin fusion gene exhibiting dramatic antitumor efficacy. *Clin Cancer Res*. 2008 Jan 1;14(1):291-9.
97. Lin X, Takahashi K, Campion SL, Liu Y, Gustavsen GG, Peña LA, Zamora PO. Synthetic peptide F2A4-K-NS mimics fibroblast growth factor-2 in vitro and is angiogenic in vivo. *Int J Mol Med*. 2006;17(5):833-9.
98. Liu TC, Zhang T, Fukuhara H, Kuroda T, Todo T, Martuza RL, Rabkin SD, Kurtz A. Oncolytic HSV armed with platelet factor 4, an antiangiogenic agent, shows enhanced efficacy. *Mol Ther*. 2006;14(6):789-97.
99. Liu Y, Cao DJ, Sainz IM, Guo YL, Colman RW. The inhibitory effect of HKa in endothelial cell tube formation is mediated by disrupting the uPA-uPAR complex and inhibiting its signaling and internalization. *Am J Physiol Cell Physiol*. 2008 Jul;295(1):C257-67.
100. Lorenowicz MJ, Fernandez-Borja M, Kooistra MR, Bos JL, Hordijk PL. PKA and Epac1 regulate endothelial integrity and migration through parallel and independent pathways. *Eur J Cell Biol*. 2008 Oct;87(10):779-92.
101. Luo B, Soesanto Y, McClain DA. Protein modification by O-linked GlcNAc reduces angiogenesis by inhibiting Akt activity in endothelial cells. *Arterioscler Thromb Vasc Biol*. 2008 Apr;28(4):651-7.
102. Ma EL, Li YC, Tsuneki H, Xiao JF, Xia MY, Wang MW, Kimura I. Beta-eudesmol suppresses tumour growth through inhibition of tumour neovascularisation and tumour cell proliferation. *J Asian Nat Prod Res*. 2008 Jan-Feb;10(1-2):159-67.
103. Ma Z, Myers DP, Wu RF, Nwariaku FE, Terada LS. p66Shc mediates anoikis through RhoA. *J Cell Biol*. 2007 Oct 8;179(1):23-31.

104. Maiti D, Xu Z, Duh EJ. Vascular endothelial growth factor induces MEF2C and MEF2-dependent activity in endothelial cells. *Invest Ophthalmol Vis Sci.* 2008 Aug;49(8):3640-8.
105. Majem M, Cascallo M, Bayo-Puxan N, Mesia R, Germa JR, Alemany R. Control of E1A under an E2F-1 promoter insulated with the myotonic dystrophy locus insulator reduces the toxicity of oncolytic adenovirus Ad-Delta24RGD. *Cancer Gene Ther.* 2006; 13(7):696-705.
106. Mathur AB, Reichert WM, Truskey GA. Flow and high affinity binding affect the elastic modulus of the nucleus, cell body and the stress fibers of endothelial cells. *Ann Biomed Eng.* 2007 Jul;35(7):1120-30.
107. Mazzinghi B, Ronconi E, Lazzeri E, Sagrinati C, Ballerini L, Angelotti ML, Parente E, Mancina R, Netti GS, Becherucci F, Gacci M, Carini M, Gesualdo L, Rotondi M, Maggi E, Lasagni L, Serio M, Romagnani S, Romagnani P. Essential but differential role for CXCR4 and CXCR7 in the therapeutic homing of human renal progenitor cells. *J Exp Med.* 2008 Feb 18; 205(2):479-90.
108. McGuigan AP, Sefton MV. Design and fabrication of sub-mm-sized modules containing encapsulated cells for modular tissue engineering. *Tiss Engin.* 2007; 13(5): 1069-78.
109. McGuigan AP, Sefton MV. The thrombogenicity of human umbilical vein endothelial cell seeded collagen modules. *Biomaterials.* 2008 Jun;29(16):2453-63.
110. McGuigan AP, Sefton MV. Vascularized organoid engineered by modular assembly enables blood perfusion. *Proc Natl Acad Sci U S A.* 2006; 103(31):11461-6.
111. Melrose J, Tsurushita N, Liu G, Berg EL. IFN-gamma inhibits activation-induced expression of E- and P-selectin on endothelial cells. *Immunol.* 1998; 161: 2457-64.
112. Merino A, Noguerras S, García-Maceira T, Rodríguez M, Martín-Malo A, Ramirez R, Carracedo J, Aljama P. Bacterial DNA and endothelial damage in haemodialysis patients. *Nephrol Dial Transplant.* 2008 Nov;23(11):3635-42.
113. Mhashilkar AM, Schrock RD, Hindi M, Liao J, Sieger K, Kourouma F, Zou-Yang H, Onishi E, Takh O, Vedvick TS, Fanger G, Stewart L, Watson GJ, Snary D, Risher PB, Saeki T, Roth JA, Ramesh R, Chada S. Melanoma differentiation associated gene-7 (mda-7): a novel anti-tumor gene for cancer gene therapy. *Mol Med.* 2001; 7(4): 271-82.
114. Miyashita K, Itoh H, Arai H, Suganami T, Sawada N, Fukunaga Y, Sone M, Yamahara K, Yurugi-Kobayashi T, Park K, Oyamada N, Sawada N, Taura D, Tsujimoto H, Chao TH, Tamura N, Mukoyama M, Nakao K. The neuroprotective and vasculo-neuro-regenerative roles of adrenomedullin in ischemic brain and its therapeutic potential. *Endocrinology.* 2006;147(4):1642-53.
115. Mole DJ, McFerran NV, Collett G, O'Neill C, Diamond T, Garden OJ, Kylanpaa L, Repo H, Deitch EA. Tryptophan catabolites in mesenteric lymph may contribute to pancreatitis-associated organ failure. *Br J Surg.* 2008 Jul;95(7):855-67.
116. Molina, RP, Ye HQ, Brady J, Zhang J, Zimmerman H, Kaleko M, Luo T. A synthetic rev-independent bovine immunodeficiency virus-based packaging construct. *Human Gene Ther.* 2004; 15: 165-77.
117. Moran MT, Carroll WM, Gorelov A, Rochev Y. Intact endothelial cell sheet harvesting from thermoresponsive surfaces coated with cell adhesion promoters. *J R Soc Interface.* 2007 Dec 22;4(17):1151-7.
118. Mukherjee P, Faber AC, Shelton LM, Baek RC, Chiles TC, Seyfried TN. Ganglioside GM3 suppresses the pro-angiogenic effects of vascular endothelial growth factor and ganglioside GD1A. *J Lipid Res.* 2008 Feb 20. [Epub ahead of print]
119. Murakami T, Takagi H, Suzuma K, Suzuma I, Ohashi H, Watanabe D, Ojima T, Suganami E, Kurimoto M, Kaneto H, Honda Y, Yoshimura. Angiopoietin-1 attenuates H<sub>2</sub>O<sub>2</sub>-induced SEK1/JNK phosphorylation through the phosphatidylinositol 3-kinase/Akt pathway in vascular endothelial cells. *J Biol Chem.* 2005; 280(36): 31841-9.
120. Nahari D, Satchi-Fainaro R, Chen M, Mitchell I, Task LB, Liu Z, Kihneman J, Carroll AB, Terada LS, Nwariaku FE. Tumor cytotoxicity and endothelial Rac inhibition induced by TNP-470 in anaplastic thyroid cancer. *Mol Cancer Ther.* 2007 Apr;6(4):1329-37.
121. Nakamura K, Taguchi E, Miura T, Yamamoto A, Takahashi K, Bichat F, Guilbaud N, Hasegawa K, Kubo K, Fujiwara Y, Suzuki R, Kubo K, Shibuya M, Isae T.

- KRN951, a highly potent inhibitor of vascular endothelial growth factor receptor tyrosine kinases, has antitumor activities and affects functional vascular properties. *Cancer Res.* 2006; 66(18):9134-42.
122. Nakao A, Kaczorowski DJ, Zuckerbraun BS, Lei J, Faleo G, Deguchi K, McCurry KR, Billiar TR, Kanno S. Galantamine and carbon monoxide protect brain microvascular endothelial cells by heme oxygenase-1 induction. *Biochem Biophys Res Commun.* 2008 Mar 14;367(3):674-9.
  123. Narita K, Staub J, Chien J, Meyer K, Bauer M, Friedl A, Ramakrishnan S, Shridhar V. HSulf-1 inhibits angiogenesis and tumorigenesis in vivo. *Cancer Res.* 2006; 66(12): 6025-32.
  124. Ng SS, Sparreboom A, Shaked Y, Lee C, Man S, Desai N, Soon-Shiong P, Figg WD, Kerbel RS. Influence of formulation vehicle on metronomic taxane chemotherapy: albumin-bound versus cremophor EL-based paclitaxel. *Clin Cancer Res.* 2006;12(14 Pt 1):4331-8.
  125. Nicholson B, Lloyd GK, Miller BR, Palladino MA, Kiso Y, Hayashi Y, Neuteboom ST. NPI-2358 is a tubulin-depolymerizing agent: in-vitro evidence for activity as a tumor vascular-disrupting agent. *Anticancer Drugs.* 2006;17(1):25-31.
  126. Norling LV, Sampaio AL, Cooper D, Perretti M. Inhibitory control of endothelial galectin-1 on in vitro and in vivo lymphocyte trafficking. *FASEB J.* 2008 Mar;22(3):682-90.
  127. Oh SH, Woo JK, Jin Q, Kang HJ, Jeong JW, Kim KW, Hong WK, Lee HY. Identification of novel antiangiogenic anticancer activities of deguelin targeting hypoxia-inducible factor-1 alpha. *Int J Cancer.* 2008 Jan 1;122(1):5-14.
  128. Ohno H, Kubo K, Murooka H, Kobayashi Y, Nishitoba T, Shibuya M, Yoneda T, Isoe T. A c-fms tyrosine kinase inhibitor, Ki20227, suppresses osteoclast differentiation and osteolytic bone destruction in a bone metastasis model. *Mol Cancer Ther.* 2006;5(11):2634-43.
  129. Okamoto N, Nukada Y, Tezuka K, Ohashi K, Mizuno K, Tsuji T. AILIM/ICOS signaling induces T-cell migration/polarization of memory/effector T-cells. *Int Immunol.* 2004; 16(10): 1515-22.
  130. Ovcharenko D, Jarvis R, Hunicke-Smith S, Kelnar K, Brown D. High-throughput screening in vitro: from cell lines to primary cells. *RNA.* 2005; 11: 985-93.
  131. Park WB, Lee JH, Jeon JH, Lee SJ, Kim SH, Kim NJ, Kim HB, Oh MD, Choe KW. Effect of tumor necrosis factor-alpha on intracellular Staphylococcus aureus in vascular endothelial cells. *FEMS Immunol Med Microbiol.* 2008 Mar;52(2):247-52.
  132. Patra CR, Bhattacharya R, Patra S, Basu S, Mukherjee P, Mukhopadhyay D. Inorganic phosphate nanorods are a novel fluorescent label in cell biology. *J Nanobiotechnology.* 2006 Oct 30; 4:11.
  133. Patschan S, Chen J, Polotskaia A, Mendeleev N, Cheng J, Patschan D, Goligorsky MS. Lipid mediators of autophagy in stress-induced premature senescence of endothelial cells. *Am J Physiol Heart Circ Physiol.* 2008 Mar;294(3):H1119-29.
  134. Pruitt HM, Langston W, Kevil CG, Patel RP. ICAM-1 cross-linking stimulates endothelial glutathione synthesis. *Antioxid Redox Signal.* 2007; 9(1):159-64.
  135. Punched MA, Stenson-Cox C, O'cearbhaill ED, Lyons E, Gundy S, Murphy L, Pandit A, McHugh PE, Barron V. Endothelial cell response to biomechanical forces under simulated vascular loading conditions. *J Biomech.* 2007;40(14):3146-54.
  136. Rael LT, Rao NK, Thomas GW, Bar-Or R, Curtis CG, Bar-Or D. Combined cupric- and cuprous-binding peptides are effective in preventing IL-8 release from endothelial cells and redox reactions. *Biochem Biophys Res Commun.* 2007 Jun 1;357(2):543-8.
  137. Rajalingam D, Kacer D, Prudovsky I, Kumar TK. Molecular cloning, overexpression and characterization of human interleukin 1alpha. *Biochem Biophys Res Commun.* 2007 Aug 31;360(3):604-8.
  138. Ramachandra M, Rahman A, Zou A, Vaillancourt M, Howe JA, Antelman D, Sugarman B, Demers GW, Engler H, Johnson D, Shabram P. Re-engineering adenovirus regulatory pathways to enhance oncolytic specificity and efficacy. *Nat Biotech.* 2001 Nov; 19: 1035-41.
  139. Ramponi S, Grotti A, Morisetti A, Vultaggio S, Lorusso V. Effects of iodinated contrast media on endothelium: An in vitro study. *Toxicol In Vitro.* 2007 Mar;21(2):191-6.
  140. Rhim JH, Kim SA, Lee JE, Kim DJ, Chung HK, Shin KJ, Chung J. Cancer cell-derived IL-1alpha induces IL-8 release in endothelial cells. *J Cancer Res Clin Oncol.* 2008 Jan;134(1):45-50.

141. Rivera-Feliciano J, Lee KH, Kong SW, Rajagopal S, Ma Q, Springer Z, Izumo S, Tabin CJ, Pu WT. Development of heart valves requires Gata4 expression in endothelial-derived cells. *Development*. 2006; 133(18):3607-18.
142. Roomi MW, Monterrey JC, Kalinovsky T, Rath M, Niedzwiecki A. Distinct patterns of matrix metalloproteinase-2 and -9 expression in normal human cell lines. *Oncol Rep*. 2009 Mar; 21(3):821-6.
143. Sakimoto I, Ohta K, Yamazaki T, Ohtani S, Sahara H, Sugawara F, Sakaguchi K, Miura M. Alpha-sulfoquinovosylmonoacylglycerol is a novel potent radiosensitizer targeting tumor angiogenesis. *Cancer Res*. 2006; 66(4):2287-95.
144. Salani B, Briatore L, Garibaldi S, Cordera R, Maggi D. Caveolin-1 down-regulation inhibits insulin-like growth factor-I receptor signal transduction in H9C2 rat cardiomyoblasts. *Endocrinology*. 2008 Feb;149(2):461-5.
145. Sassetti C, Van Zante A, Rosen SD. Identification of endoglycan, a member of the CD34/podocalyxin family of sialomucins. *J Biol Chem*. 2000; 275(12): 9001-10.
146. Sawai K, Mukoyama M, Mori K, Kasahara M, Koshikawa M, Yokoi H, Yoshioka T, Ogawa Y, Sugawara A, Nishiyama H, Yamada S, Kuwahara T, Saleem MA, Shiota K, Ogawa O, Miyazato M, Kangawa K, Nakao K. Expression of CCN1 (CYR61) in developing, normal, and diseased human kidney. *Am J Physiol Renal Physiol*. 2007 Oct;293(4):F1363-72
147. Scalera F, Kielstein JT, Martens-Lobenhoffer J, Postel SC, Täger M, Böde-Boger. Erythropoietin increases asymmetric dimethylarginine in endothelial cells: role of dimethylarginine dimethylaminohydrolase. *J Am Soc Nephrol*. 2005; 16: 892-8.
148. Schutyser E, Struyf S, Wuyts A, Out W, Geboes K, Grillet B, Opendakker G, Van Damme J. Selective induction of CCL18/PARC by staphylococcal enterotoxins in mononuclear cells and enhanced levels in septic and rheumatoid arthritis. 2001; 31(12): 2755-62.
149. Sensken SC, Stäubert C, Keul P, Levkau B, Schöneberg T, Gräler MH. Selective activation of G alpha i mediated signalling of S1P(3) by FTY720-phosphate. *Cell Signal*. 2008 Jun;20(6):1125-33.
150. Shankar S, Chen Q, Srivastava RK. Inhibition of PI3K/AKT and MEK/ERK pathways act synergistically to enhance antiangiogenic effects of EGCG through activation of FOXO transcription factor. *J Mol Signal*. 2008 Mar 20;3:7.
151. Shelby BD, LaMarca HL, McFerrin HE, Nelson AB, Lasky JA, Sun G, Myatt L, Offermann MK, Morris CA, Sullivan DE. Kaposi's sarcoma associated herpesvirus G-protein coupled receptor activation of cyclooxygenase-2 in vascular endothelial cells. *Virology*. 2007 Sep 14;4:87.
152. Siu T, Rohling R, Chiao M. Microdevice-based delivery of gene products using sonoporation. *Biomed Microdevices*. 2007 Jun;9(3):295-300.
153. Smith JR, Henderson WW, Rosenbaum JT, Neuwelt EA, Moses AV. Cultured human endothelial cells expressing HIV-1 Vpu and Tat support the expansion of malignant B cells from primary central nervous system lymphoma. *Br J Ophthalmol*. 2008 Feb;92(2):297-9.
154. Soncin F, Mattot V, Lionneton F, Spruyt N, Lepretre F, Begue A, Stehelin D. VE-statin, an endothelial repressor of smooth muscle cell migration. *EMBO J*. 2003; 22(21): 5700-11.
155. Song YJ, Lee JY, Joo HK, Kim HS, Lee SK, Lee KH, Cho CH, Park JB, Jeon BH. Tat-APE1/ref-1 protein inhibits TNF-alpha-induced endothelial cell activation. *Biochem Biophys Res Commun*. 2008 Mar 28;368(1):68-73.
156. Srikiatkachorn A, Ajariyakhajorn C, Endy TP, Kalayanarooj S, Libraty DH, Green S, Ennis FA, Rothman AL. Virus-induced decline in soluble vascular endothelial growth receptor 2 is associated with plasma leakage in dengue hemorrhagic fever. *J Virol*. 2007; 81(4):1592-600.
157. Stewart AL, Mhashikar AM, Yang XH, Ekmekcioglu S, Saito Y, Sieger K, Schrock R, Onishi E, Swanson X, Mumm JB, Zumstein L, Watson GJ, Snary D, Roth JA, Grimm EA, Ramesh R, Chada S. PI3K blockade by Ad-PTEN inhibits invasion and induces apoptosis in radial growth phase and metastatic melanoma cells. *Mol Med*. 2002; 8(8): 451-61.
158. Sun Q, Matta H, Lu G, Chaudhary PM. Induction of IL-8 expression by human herpesvirus 8 encoded vFLIP K13 via NF-

- kappaB activation. *Oncogene*. 2006; 25(19):2717-26.
159. Sweeney E, Ward TH, Gray N, Womack C, Jayson G, Hughes A, Dive C, Byers R. Quantitative multiplexed quantum dot immunohistochemistry. *Biochem Biophys Res Commun*. 2008 Sep 19;374(2):181-6.
160. Taguchi E, Nakamura K, Miura T, Shibuya M, Isoe T. Anti-tumor activity and tumor vessel normalization by the vascular endothelial growth factor receptor tyrosine kinase inhibitor KR951 in a rat peritoneal disseminated tumor model. *Cancer Sci*. 2008 Mar;99(3):623-30.
161. Tajima A, Seki K, Shinji H, Masuda S. Inhibition of interleukin-8 production in human endothelial cells by *Staphylococcus aureus* supernatant. *Clin Exp Immunol*. 2007;147(1):148-54.
162. Tamo W, Imaizumi T, Tanji K, Yoshida H, Takanashi S, Wakabayashi K, Takahashi R, Hattori N, Satoh K. Parkin is expressed in vascular endothelial cells. *Neurosci Lett*. 2007 Jun 4;419(3):199-201.
163. Tan J, Geng L, Yazlovitskaya EM, Hallahan DE. Protein kinase B/Akt-dependent phosphorylation of glycogen synthase kinase-3beta in irradiated vascular endothelium. *Cancer Res*. 2006; 66(4):2320-7.
164. Tian S, Hayes AJ, Metheny-Barlow LJ, Li LY. Stabilization of breast cancer xenograft tumour neovasculature by angiopoitin-1. *Br J Canc*. 2002 Feb 12; 86(4): 645-51.
165. Tsuneki H, Sekizaki N, Suzuki T, Kobayashi S, Wada T, Okamoto T, Kimura I, Sasaoka T. Coenzyme Q10 prevents high glucose-induced oxidative stress in human umbilical vein endothelial cells. *Eur J Pharmacol*. 2007 Jul 2;566(1-3):1-10.
166. Tu T, Thotala D, Geng L, Hallahan DE, Willey CD. Bone marrow X kinase-mediated signal transduction in irradiated vascular endothelium. *Cancer Res*. 2008 Apr 15;68(8):2861-9.
167. Verheul HM, Salumbides B, Van Erp K, Hammers H, Qian DZ, Sanni T, Atadja P, Pili R. Combination strategy targeting the hypoxia inducible factor-1 alpha with mammalian target of rapamycin and histone deacetylase inhibitors. *Clin Cancer Res*. 2008 Jun 1;14(11):3589-97.
168. Wågsäter D, Sheikine Y, Sirsjö A. All-trans retinoic acid regulates CXCL16/SR-PSOX expression. *Int J Mol Med*. 2005; 16: 661-5.
169. Wang Q, Zhu X, Xu Q, Ding X, Chen YE, Song Q. Effect of C-reactive protein on gene expression in vascular endothelial cells. *Am J Physiol Heart Circ Physiol*. 2005; 288: H1539-45.
170. Wannenes F, Ciafre SA, Niola F, Frajese G, Farace MG. Vector-based RNA interference against vascular endothelial growth factor-A significantly limits vascularization and growth of prostate cancer in vivo. *Canc Gene Ther*. 2005; 12(12): 926-34.
171. Warabi E, Takabe W, Minami T, Inoue K, Itoh K, Yamamoto M, Ishii T, Kodama T, Noguchi N. Shear stress stabilizes NF-E2-related factor 2 and induces antioxidant genes in endothelial cells: role of reactive oxygen/nitrogen species. *Free Radic Biol Med*. 2007 Jan 15;42(2):260-9.
172. Watanabe J, Natsume T, Kobayashi M. Antivascular effects of TZT-1027 (Soblidotin) on murine Colon26 adenocarcinoma. *Cancer Sci*. 2006; 97(12):1410-6.
173. Weigel-Kelley KA, Yoder MC, Srivastava A. Recombinant human parvovirus B19 vectors: erythrocyte P antigen is necessary but not sufficient for successful transduction of human hematopoietic cells. *J Virol*. 2001 May; 75(9): 4110-6.
174. Wilhelm SM, Carter C, Tang L, Wilkie D, McNabola A, Rong H, Chen C, Zhang X, Vincent P, McHugh M, Cao Y, Shujath J, Gawlak S, Eveleigh D, Rowley B, Liu L, Adnane L, Lynch M, Auclair D, Taylor I, Gedrick R, Voznesensky A, Riedl B, Post LE, Bollag G, Trail PA. BAY 43-9006 exhibits broad spectrum oral antitumor activity and targets the RAF/MEK/ERK pathway and receptor tyrosine kinases involved in tumor progression and angiogenesis. *Canc Res*. 2004; 64: 7099-109.
175. Williams MR, Kataoka N, Sakurai Y, Powers CM, Eskin SG, McIntire LV. Gene expression of endothelial cells due to interleukin-1 beta stimulation and neutrophil transmigration. *Endothelium*. 2008 Jan-Feb;15(1):73-165.
176. Wittmer CR, Phelps JA, Saltzman WM, Van Tassel PR. Fibronectin terminated multilayer films: protein adsorption and cell attachment studies. *Biomaterials*. 2007; 28(5):851-60.



177. Wright A, Li YH, Zhu C. Integrin dependence of Calu-1 cell motility on endothelial extracellular matrix proteins. *Ann Biomed Eng.* 2008 Jun;36(6):970-9.
178. Wright A, Li YH, Zhu C. The differential effect of endothelial cell factors on in vitro motility of malignant and non-malignant cells. *Ann Biomed Eng.* 2008 Jun;36(6):958-69.
179. Xiao D, Singh SV. z-Guggulsterone, a constituent of Ayurvedic medicinal plant *Commiphora mukul*, inhibits angiogenesis in vitro and in vivo. *Mol Cancer Ther.* 2008 Jan;7(1):171-80.
180. Xu B, Broome U, Uzunel M, Nava S, Ge Z, Kumagai-Braesch M, Hultenby K, Christensson B, Ericzon B-G, Holgersson J, Sumitran-Holgersson S. Capillarization of hepatic sinusoid by liver endothelial cell-reactive autoantibodies in patients with cirrhosis and chronic hepatitis. *Am J Path.* 2003 Oct; 163(4): 1275-89.
181. Yang C, Mwaikambo BR, Zhu T, Gagnon C, Lafleur J, Seshadri S, Lachapelle P, Lavoie JC, Chemtob S, Hardy P. Lymphocytic microparticles inhibit angiogenesis by stimulating oxidative stress and negatively regulating VEGF-induced pathways. *Am J Physiol Regul Integr Comp Physiol.* 2008 Feb;294(2):R467-76.
182. Yang LV, Radu CG, Roy M, Lee S, McLaughlin J, Teitell MA, Iruela-Arispe ML, Witte ON. Vascular abnormalities in mice deficient for the G protein-coupled receptor GPR4 that functions as a pH sensor. *Mol Cell Biol.* 2007; 27(4): 1334-47.
183. Yano M, Nakamuta S, Shiota M, Endo H, Kido H. Gatekeeper role of 14-3-3tau protein in HIV-1 gp120-mediated apoptosis of human endothelial cells by inactivation of Bad. *AIDS.* 2007 May 11;21(8):911-20.
184. Ye J, Li Y, Hamasaki T, Nakamichi N, Komatsu T, Kashiwagi T, Teruya K, Nishikawa R, Kawahara T, Osada K, Toh K, Abe M, Tian H, Kabayama S, Otsubo K, Morisawa S, Katakura Y, Shirahata S. Inhibitory effect of electrolyzed reduced water on tumor angiogenesis. *Biol Pharm Bull.* 2008 Jan;31(1):19-26.
185. Yee A, Bosworth KA, Conway DE, Eskin SG, McIntire LV. Gene expression of endothelial cells under pulsatile non-reversing vs. steady shear stress; comparison of nitric oxide production. *Ann Biomed Eng.* 2008 Apr;36(4):571-9.
186. Yee A, Sakurai Y, Eskin SG, McIntire LV. A validated system for simulating common carotid arterial flow in vitro: alteration of endothelial cell response. *Ann Biomed Eng.* 2006;34(4):593-604.
187. Yu EZ, Li Y-Y, Liu X-H, Kagan E, McCarron RM. Antiapoptotic action of hypoxia-inducible factor-1 $\alpha$  in human endothelial cells. *Lab Invest.* 2004; 84: 553-61.
188. Yumoto H, Yamada M, Shinohara C, Nakae H, Takahashi K, Azakami H, Ebisu S, Matsuo T. Soluble products from *Eikenella corrodens* induce cell proliferation and expression of interleukin-8 and adhesion molecules in endothelial cells via mitogen-activated protein kinase pathways. *Oral Microbiol Immunol.* 2007 Feb;22(1):36-45.
189. Zeng Y, Opeskin K, Goad J, Williams ED. Tumor-Induced Activation of Lymphatic Endothelial Cells via Vascular Endothelial Growth Factor Receptor-2 Is Critical for Prostate Cancer Lymphatic Metastasis. *Cancer Res.* 2006;66(19):9566-75.
190. Zhang X, Wojcikiewicz EP, Moy VT. Dynamic adhesion of T lymphocytes to endothelial cells revealed by atomic force microscopy. *Exp Biol Med (Maywood).* 2006; 231(8):1306-12.
191. Zhang Y, Furumura M, Morita E. Distinct signaling pathways confer different vascular responses to VEGF 121 and VEGF 165. *Growth Factors.* 2008 Jun;26(3):125-31.
192. Zhang Y, Matsuo H, Morita E. Vascular endothelial growth factor 121 is the predominant isoform in psoriatic scales. *Exp Dermatol.* 2005; 14(10): 758-64.
193. Zhao Y, Qiu Q, Mahdi F, Shariat-Madar Z, Røjkjær R, Schmaier AH. Assembly and activation of HK-PK complex on endothelial cells result in bradykinin liberation and NO formation. *Am J Physiol Heart Circ Physiol.* 2001; 280: H1821-9.
194. Zhou Q, Kiosses WB, Liu J, Schimmel P. Tumor endothelial cell tube formation model for determining anti-angiogenic activity of a tRNA synthetase cytokine. *Methods.* 2008 Feb;44(2):190-5.
195. Ziauddin MF, Yeow WS, Maxhimer JB, Baras A, Chua A, Reddy RM, Tsai W, Cole GW, Schrumph DS, Nguyen DM. Valproic acid, an antiepileptic drug with histone deacetylase inhibitory activity, potentiates the cytotoxic effect of Apo2L/TRAIL on cultured thoracic cancer cells through

mitochondria-dependent caspase activation. *Neoplasia*. 2006; 8(6):446-57.

196. Zou Y, Chiou GC. Apigenin inhibits laser-induced choroidal neovascularization and regulates endothelial cell function. *J Ocul Pharmacol Ther*. 2006; 22(6): 425-30.
197. Zou Y, Jiang W, Chiou GC. Effect of tetramethylpyrazine on rat experimental choroidal neovascularization in vivo and endothelial cell cultures in vitro. *Curr Eye Res*. 2007;32(1):71-5.
198. Zou Y, Xu X, Chiou GC. Effect of interleukin-1 blockers, CK112, and CK116 on rat experimental choroidal neovascularization in vivo and endothelial cell cultures in vitro. *J Ocul Pharmacol Ther*. 2006; 22(1):19-25.

## Specialty Cell Types

1. *PMNEC*: Kausalya S, Nath J. Interactive role of nitric oxide and superoxide anion in neutrophil-mediated endothelial cell injury. *Leukocyte Biol*. 1998; 64: 185-91.
2. *Sap Vein*: Molina RP, Ye HQ, Brady J, Zhang J, Zimmerman H, Kaleko M, Luo T. A synthetic rev-independent bovine immunodeficiency virus-based packaging construct. *Human Gene Ther*. 2004; 15: 865-77.

## Media

1. Ai Hua, Mills DK, Johnathan AS, Jones SA. Gelatin-glutaraldehyde cross-linking on silicone rubber to increase endothelial cell adhesion and growth. *In Vitro Cell Dev Biol*. 2002; 38: 487-92.
2. Bussolati B, Bruno S, Grange C, Buttiglieri S, Deregibus MC, Cantino D, Camussi G. Isolation of renal progenitor cells from adult human kidney. *Am J Pathol*. 2005; 166: 545-55.
3. Coenjaerts FE, Hoepelman AI, Scharringa J, Aarts M, Ellerbroek PM, Bevaart L, Van Strijp JA, Janbon G. The *Skn7* response regulator of *Cryptococcus neoformans* is involved in oxidative stress signalling and augments intracellular survival in endothelium. *FEMS Yeast Res*. 2006; 6(4):652-61.
4. Detmar M, Imcke E, Ruszczak Z, Orfanos CE. Effects of recombinant tumor necrosis factor- alpha on cultured microvascular endothelial cells derived from human

dermis. *J Invest Dermatol*. 1990; 95(6): 219S-22S.

5. Detmar M, Tenorio S, Hettmannsperger U, Ruszczak Z, Orfanos CE. Cytokine regulation of proliferation and ICAM-1 expression of human dermal microvascular endothelial cells in vitro. *J Invest Dermatol*. 1992(98): 147-53.
6. Edgell CJ, Curiel DT, Hu PC, Marr HS. Efficient gene transfer to human endothelial cells using DNA complexed to adenovirus particles. *BioTechniq*. 1998; 25: 264-73.
7. Edlund M, Anderson E, Fried G. Progesterone withdrawal causes endothelin release from cultured human uterine microvascular endothelial cells. *Hum Reprod*. 2004; 19(6): 1272-80.
8. *EGM on Mouse Endothelial Cells*: Isenberg JS, Ridnour LA, Perruccio EM, Espey MG, Wink DA, Roberts DD. Thrombospondin-1 inhibits endothelial cell responses to nitric oxide in a cGMP-dependent manner. *PNAS*. 2005; 102(37): 13141-6.
9. Frye CA, Wu X, Patrick CW. Microvascular endothelial cells sustain preadipocyte viability under hypoxic conditions. *In Vit Cell Devel Biol*. 2005; 41(5): 160-4.
10. Gruemmer R, Klein-Hipphaß, Neulen J. Regulation of gene expression in endothelial cells: the role of human follicular fluid. *J Mol Endocrinol*. 2005; 34: 37-46.
11. Hettmannsperger U, Tenorio S, Orfanos CE, Detmar M. Corticosteroids induce proliferation but do not influence TNF- or IL-1 beta-Induced ICAM-1 expression of human dermal microvascular endothelial cells in vitro. *Dermatol Res*. 1993; 285: 347-51.
12. Howson, KM, Aplin AC, Gelati M, Alessandri G, Parati EA, Nicosia RF. The postnatal rat aorta contains pericyte progenitor cells that form spheroidal colonies in suspension culture. *Am J Physiol Cell Physiol*. 2005; 289: C1396-407.
13. Ingram DA, Krier TR, Mead LE, McGuire C, Prater DN, Bhavsar J, Saadatzaeh MR, Bijangi-Vishehsaraei K, Li F, Yoder MC, Haneline LS. Clonogenic endothelial progenitor cells are sensitive to oxidative stress. *Stem Cells*. 2007; 25(2): 297-304.
14. Ingram DA, Lien IZ, Mead LE, Estes M, Prater DN, Derr-Yellin E, DiMeglio LA, Haneline LS. In vitro hyperglycemia or a diabetic intrauterine environment reduces neonatal endothelial colony-forming cell

- numbers and function. *Diabetes*. 2008 Mar;57(3):724-31.
15. Ingram DA, Mead LE, Tanaka H, Meade V, Fenoglio A, Mortell K, Pollok K, Ferkowicz MJ, Gilley D, Yoder MC. Identification of a novel hierarchy of endothelial progenitor cells utilizing human peripheral and umbilical cord blood. *Blood*. 2004 Nov 1; 104(9): 2752-60. Epub 2004 Jun 29.
  16. Kerr DA, Llado J, Shablott MJ, Maragakis NK, Irani DN, Crawford TO, Krishnan C, Dike S, Gearhart JD, Rothstein JD. Human embryonic germ cell derivatives facilitate motor recovery of rats with diffuse motor neuron injury. *J Neurosci*. 2003 Jun 15; 23(12): 5131-40.
  17. Kim MS, Hwang NS, Lee J, Kim T-K, Leong K, Shablott MJ, Gearhart J, Elisseff J. Musculoskeletal differentiation of cells derived from human embryonic germ cells. *Stem Cells*. 2005; 23: 113-23.
  18. Knedler A, Ham RG. Optimized medium for clonal growth of human microvascular endothelial cells with minimal serum. *In Vitro Cell & Develop Biol*. 1987; 23: 481-91.
  19. Kraling BM, Bischoff JA. A simplified method for growth of human microvascular endothelial cells results in decreased senescence and continued responsiveness to cytokines and growth factors. *In Vitro Cell Dev Biol*. 1998; 33(1Animal): 308-15.
  20. Kusuyama T, Omura T, Nishiya D, Enomoto S, Matsumoto R, Takeuchi K, Yoshikawa J, Yoshiyama M. Effects of treatment for diabetes mellitus on circulating vascular progenitor cells. *J Pharmacol Sci*. 2006;102(1):96-102.
  21. Lin Y, Chang L, Soloverly A, Healey JF, Lollar P, Hebbel RP. Use of blood outgrowth endothelial cells for gene therapy for hemophilia A. *Blood*. 2002 Jan; 99(2): 457-62.
  22. Lin Y, Weisdorf DJ, Solovey A, Hebbel RP. Origins of circulating endothelial cells and endothelial outgrowth from blood. *J Clin Invest*. 2000 Jan; 105(1): 71-7.
  23. Lo WR, Rowlette LL, Caballero M, Yang P, Hernandez MR, Borrás T. Tissue differentiation microarray analysis of dexamethasone induction reveals potential mechanisms of steroid glaucoma. *Investig Ophthalmol & Visual Sci*. 2003; 44: 473-85.
  24. Månsson-Broberg A, Siddiqui AJ, Genander M, Grinnemo KH, Hao X, Andersson AB, Wårdell E, Sylvén C, Corbascio M. Modulation of ephrinB2 leads to increased angiogenesis in ischemic myocardium and endothelial cell proliferation. *Biochem Biophys Res Commun*. 2008 Aug 29;373(3):355-9.
  25. Massa M, Rosti V, Ramajoli I, Campanelli R, Pecci A, Viarengo G, Meli V, Marchetti M, Hoffman R, Barosi G. Circulating CD34+, CD 133+, and vascular endothelial growth factor receptor-2 positive endothelial progenitor cells in myelofibrosis with myeloid metaplasia. *J Clin Onco*. 2005; 23(24): 5688-95.
  26. McCloskey KE, Gilroy ME, Nerem RM. Use of embryonic stem cell-derived endothelial cells as a cell source to generate vessel structures in vitro. *Tissue Engin*. 2005; 11(3-4): 497-505.
  27. Morris VA, Punjabi AS, Lagunoff M. Activation of Akt through gp130 receptor signaling is required for Kaposi's sarcoma-associated herpesvirus-induced lymphatic reprogramming of endothelial cells. *J Virol*. 2008 Sep;82(17):8771-9.
  28. Nicosia RF, Bonanno E, Smith M, Yurchenco P. Modulation of angiogenesis in vitro by laminin-entactin complex. *Devel Biol*. 1994; 164: 197-206.
  29. Nicosia RF, Bonanno E, Villaschi S. Large-vessel endothelium switches to a microvascular phenotype during angiogenesis in collagen gel culture of rat aorta. *Atheroscler*. 1992(95): 191-9.
  30. Nicosia RF, Nicosia SV, Smith M. Vascular endothelial growth factor, platelet-derived growth factor, and insulin-like growth factor - 1 promote rat aortic angiogenesis in vitro. *Am J Pathol*. 1994; 145(5): 1023-9.
  31. Nicosia RF, Villaschi S, Smith M. Isolation and characterization of vasoformative endothelial cells from the rat aorta. *In Vitro Cell Dev Biol*. 1994; 30A: 394-9.
  32. Park SY, Lee JH, Kim KY, Kim EK, Yun SJ, Kim CD, Lee WS, Hong KW. Cilostazol increases 3T3-L1 preadipocyte differentiation with improved glucose uptake associated with activation of peroxisome proliferator-activated receptor-gamma transcription. *Atherosclerosis*. 2008 Dec;201(2):258-65.
  33. Reinblatt M, Pin RH, Bowers WJ, Federoff HJ, Fong Y. Herpes simplex virus amplicon delivery of a hypoxia-inducible soluble vascular endothelial growth factor receptor (sFLK-1) inhibits angiogenesis and tumor

- growth in pancreatic adenocarcinoma. *Ann of Surgical Oncol.* 2005; 12: 1025-36.
34. Rossini A, Zacheo A, Mocini D, Totta P, Facchiano A, Castoldi R, Sordini P, Pompilio G, Abeni D, Capogrossi MC, Germani A. HMGB1-stimulated human primary cardiac fibroblasts exert a paracrine action on human and murine cardiac stem cells. *J Mol Cell Cardiol.* 2008 Apr;44(4):683-93.
35. Salamanca CM, Maines-Bandiera SL, Leung PC, Hu YL, Auersperg N. Effects of epidermal growth factor/hydrocortisone on the growth and differentiation of human ovarian surface epithelium. *J Soc Gynecol Investig.* 2004 May; 11(4): 241-51.
36. Satchell SC, Anderson KL, Mathieson PW. Angiopoietin 1 and vascular endothelial growth factor modulate human glomerular endothelial cell barrier properties. *J Am Soc Nephrol.* 2004; 15: 566-74.
37. Shen J, Ham RG, Karmiol S. Expression of adhesion molecules in cultured human pulmonary microvascular endothelial cells. *Microvasc Res.* 1995 Nov; 50(3): 360-72.
38. Shulby SA, Dolloff NG, Stearns ME, Meucci O, Fatatis A. CX3CR1-fractalkine expression regulated cellular mechanisms involved in adhesion, migration, and survival of human prostate cancer cells. *Canc Res.* 2004 Jul; 64: 4693-8.
39. Simper D, Stalboerger PG, Panetta CJ, Wang S, Caplice NM. Smooth muscle progenitor cells in human blood. *Circ.* 2002; 106: 119-204.
40. Sun LC, Luo J, Mackey LV, Fuselier JA, Coy DH. A conjugate of camptothecin and a somatostatin analog against prostate cancer cell invasion via a possible signaling pathway involving PI3K/Akt, alphaVbeta3/alphaVbeta5 and MMP-2/-9. *Cancer Lett.* 2007; 246(1-2):157-66.
41. Vinson SM, Rickard A, Ryerse JS, McHowat J. Neutrophil adherence to bladder microvascular endothelial cells following platelet-activating factor acetylhydrolase inhibition. *J Pharmacol.* 2005; 314(3): 1241-7.
42. Watson CA, Camera-Benson L, Palmer-Crocker R, Pober JS. Variability among human umbilical vein endothelial cultures. *Sci.* 1995; 268: 447-8.
43. Xie S, Fang N, Liu S, Zhou P, Zhang Y, Wang S, Gao H, Pan L. Differentiation of smooth muscle progenitor cells in peripheral blood and its application in tissue engineered blood vessels. *J Zhejiang Univ Sci B.* 2008 December; 9(12): 923-930.
44. Yoon Y-S, Wecker A, Heyd L, Park J-S, Tkebuchava T, Kusano K, Hanley A, Scadova H, Qin G, Cha D-H, Johnson KL, Aikawa R, Asahara T, Losordo DW. Clonally expanded novel multipotent stem cells from human bone marrow after myocardial infarction. *J Clin Invest.* 2005; 115(2): 326-38.
45. Yu Y, Fukuda N, Yao EH, Matsumoto T, Kobayashi N, Suzuki R, Tahira Y, Ueno T, Matsumoto K. Effects of an ARB on endothelial progenitor cell function and cardiovascular oxidation in hypertension. *Am J Hypertens.* 2008 Jan;21(1):72-7.

\* References not specifically citing the use of Lonza cells, media, or reagents in their research.

+ Denotes sections containing only the articles published within the last ten years.