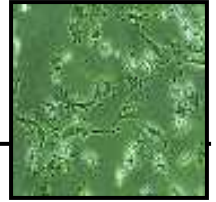


Poietics™ normal human dendritic cells

NHDC, HPBMC



Introduction

The Poietics™ human dendritic cell system contains primary derived cultures of normal human dendritic cells (NHDC) and/or human peripheral blood mononuclear cells (HPBMC). The system includes optimized medium for cell sustenance. This system may be used for experimental applications such as: effectiveness of immunosuppressive drugs to alter dendritic cell cytokine secretion; antigen presentation studies; antigen uptake studies; phenotypic studies of NHDC. Poietics™ dendritic cell systems are convenient and easy to use, freeing the researcher to focus on results. Cryopreserved NHDC and HPBMC are shipped frozen.

Poietics™ cells, medium and reagents are quality tested together and guaranteed to perform as a complete cell system.

Cell System Components

- One frozen normal human dendritic cell and/or human peripheral blood mononuclear cell product
- Poietics™ LGM-3™, (CC-3211) contains 500 ml of lymphocyte growth medium -3 serum free, complete with albumin, insulin, transferrin and gentamicin

Characterization of Cells

All cells are isolated from peripheral blood by leukopheresis and density gradient centrifugation. After four days in culture the NHDC stain $\geq 90\%$ positive for CD11c and CD86 surface antigens and are $\leq 5\%$ positive for CD14 surface antigen using flow cytometric analysis. Non-routine characterization assays are available upon request for an additional fee.

Poietics™ has assessed the following cell surface antigens on normal human dendritic cells:

Surface antigen	Result
CD1a	Positive (variable)
CD3	Negative
CD4	Positive (dim, low level expression)
CD8	Negative
CD11c	Positive
CD14	Negative
CD19	Negative
CD80	Low to absent
CD83	Low to absent, up regulated by IL1 β & INF α
CD86	Positive
C54	Positive
FcR γ I	Negative
FCR γ II	Positive
FcR γ III	Negative
FcR α	Low to absent

Performance

NHDC

Viability upon plating from Cryo	$\geq 85\%$
Recommended plating density	20,000 - 50,000 cells/cm ²
Viable time in culture (w/ cytokines)	7 days

HPBMC

Viability upon plating from Cryo	$\geq 85\%$
Recommended plating density	1,000,000 - 5,000,000 cells/ml
Viable time in culture (w/o cytokines)	3 days

* Note: HPBMC can remain viable indefinitely with proper stimulatory conditions.

products should be handled at the biological safety level 2 to minimize exposure of potentially infectious products, as recommended in the CDC-NIH manual, [Biosafety in Microbiological and Biomedical Laboratories](#), 5th edition. If you require further information, please contact your site safety officer or scientific support.

Quality control

Donors are screened for HIV-1, hepatitis B, hepatitis C, HTLV-1, HTLV- 2 and RPR. After four days in culture the NHDC stain $\geq 90\%$ positive for CD11c and CD86 surface antigens and are $\leq 5\%$ positive for CD14 surface antigen using flow cytometric analysis. For detailed information concerning QC testing, please refer to the certificate of analysis. Clonetics™ media is formulated for optimal support of specific types of normal human cells. Each lot of lymphocyte growth medium (LGM-3™) must meet stringent NHDC viability specifications.

Ordering information

CC-2701	NHDC, normal human dendritic cells, cryopreserved	$\geq 2.5 \times 10^6$ cells
CC-2702	HPBMC, human peripheral blood mononuclear cells, cryopreserved	$\geq 5.0 \times 10^7$ cells
CC-3211	LGM-3™ lymphocyte growth medium	500 ml

When placing an order or for scientific support, please refer to the product numbers and descriptions listed above. For a complete listing of all Poietics™ and Clonetics™ products, refer to the Lonza website or the current Lonza catalog. To obtain a catalog, additional information or scientific support you may contact Lonza by web, e-mail, telephone, fax or mail.

Product warranty

CULTURES HAVE A FINITE LIFESPAN *IN VITRO*. Lonza warrants its cells only if Poietics™ and Clonetics™ media are used, and the recommended protocols are followed. Cryopreserved NHDC and HPBMC cells are assured to be viable and functional when thawed and maintained properly.

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not approved for human or veterinary use, for application to humans or animals, or for use in clinical or *in vitro* procedures.

WARNING: CLONETICS™ AND POIETICS™ PRODUCTS CONTAIN HUMAN SOURCE MATERIAL, TREAT AS POTENTIALLY INFECTIOUS. Each donor is tested and found non-reactive by an FDA approved method for the presence of HIV-1, hepatitis B virus and hepatitis C virus. Where donor testing is not possible, cell products are tested for the presence of viral nucleic acid from HIV, hepatitis B virus, and hepatitis C virus. Testing can not offer complete assurance that HIV-1, hepatitis B virus, and hepatitis C virus are absent. All human sourced

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