

BioWhittaker™ ProVero 1

Product Information

Introduction

ProVero 1 is an animal product-free medium designed to support the growth of MDCK and Vero cell lines. The formulation is protein-free. It contains only low quantity of human recombinant insulin. Therefore, its use gives very efficient downstream process, as the only proteins present in supernatant are produced by the cells themselves.

ProVero1 does contain Hepes and NaHCO₃ as buffering system and phenol red as pH indicator. It is already supplemented with L-Glutamine (3 mM). Osmolality is around 300 mOsm/kg.

ProVero1 is available in a ready to use liquid formulation. On request, it can be delivered as powder formulation, with supplements.

Instruction for Use

ProVero1 is ready to use for MDCK cultures. For Vero cultures, ProVero1 has to be supplemented with 5.0 µg / L EGF. Cultures should be carried out at 37°. Because of the presence of Hepes in the media, CO₂ is not absolutely required. Nevertheless, a 5% CO₂ atmosphere can be used.

Although cells generally do not require a true adaptation protocol with sequential decrease in fetal bovine serum, an adaptation to the medium might be necessary. For MDCK, as these cells are made of 2 different types of cells (Principal cells and intercalated cells)⁽¹⁾, whose proportion varies from one cell line to another and with passages, adaptation time will strongly depend on the chosen cell line.

Generally, a minimal culture period of ten weeks (20 passages) is necessary for cells to reach an acceptable doubling time (30 hours) and additional passages will be necessary to reach doubling time values similar to those in FBS-supplemented medium. During first passages, doubling time will

show a sinusoidal evolution, with peaks where growth slows down, to finally reach a stable level.

In case where anyway a classical weaning (with progressive FBS concentration decrease) would appear to be necessary, a protocol is available in our catalog or from our technical support department.

Storage

ProVero 1 should be stored at 2-8 °C in the dark. Open bottles should be used rapidly.

Ordering Information

Cat.No.	Size
ProVero 1™ with L-glutamine and phenol red 02-030Q	1 L

Related Products

UltraMDCK™ 12-749Q	1 L
ProFreeze™ NAO 2x 12-769E	100 ml

Reference List

1. Gekle, M., et al. "Characterization of two MDCK-cell subtypes as a model system to study principal cell and intercalated cell properties." Pflugers Arch. 428.2 (1994): 157-62.