

Product Name

Name: MCDB-153 (Modified), with L-Glutamine

Cat. No.: C3170-0500

Size: 500 mL

Product Description

MCDB-153 (Modified) is a defined serum-free basal medium for the growth of normal keratinocytes and squamous epithelial cells. It is a basal media with growth factor supplementation. MCDB media were uniquely designed and formulated not only quantitatively but also qualitatively to provide a defined and optimally balanced cell culture milieu that selectively promotes the growth of specific cell types. These types of media were designed by Ham and colleagues specifically for the low-protein or serum-free growth of specific cells utilizing growth factors (e.g., EGF and insulin), hormones, trace elements, and or low levels of dialyzed fetal bovine serum proteins. This series of media originated out of the Department of Molecular, Cellular and Developmental Biology at the University of Colorado. MCDB 153 is a modification of Ham's nutrient mixture F-12 designed for the growth of non-transformed cell types in a serum-free formulation. MCDB 153 is specific for human epidermal keratinocyte culture, clonal growth of chicken embryo fibroblasts or Chinese Hamster Ovary (CHO) cells using low levels of fetal bovine serum proteins (FBSP), a wide array of trace elements, or no serum protein. Besides the basal components, MCDB-153 (Modified) also contains hormones and/or growth-promoting factors. These hormones or growth-promoting factors added are definitely suited and dependent upon the type and character of the cells in the culture.

MCDB-153 (Modified) contains numerous important basic constituents in a ready-to-use formulation that includes a typical and wide variety of elements, among others:

- Amino Acids
- Glucose
- Inorganic Salts
- Vitamins
- Trace Elements
- Hormones and Growth-Promoting Factors

Predominant Characteristics

- Liquid Formulation
- With D-Glucose
- With Sodium Pyruvate
- With L-Glutamine
- With Sodium Bicarbonate (NaHCO_3)
- With Phenol Red ($\text{C}_{19}\text{H}_{13}\text{NaO}_5\text{S}$) as a pH indicator
- More Uniform & Consistent Media Performance
- Sterile-Filtered (0.1 μm), Cell Culture Performance- and Endotoxin-Tested

Storage and Stability

The product should be kept at **2 - 8°C**.

The product is **light-sensitive** and therefore should not be left in the light.

Shelf life: 12 months from date of manufacture

Procedure

1. Take a bottle from the storage at 2 - 8°C and read the label.
2. Ensure that the cap of the bottle is tight.
3. Allow to equilibrate to room temperature prior to use.
4. Wipe the outside of the bottle with a disinfectant solution such as 70% ethanol.
5. Use the medium according to established protocols, using an aseptic/sterile technique under a laminar-flow culture hood.

Precaution and Disclaimer

For research use only, not for clinical diagnosis, and treatment.