MELANOCYTE MEDIUM KIT

Product No. MMK-2
Store at –20 °C

Product Description
Melanocyte Medium Kit is a sterile, liquid tissue culture medium intended for use as one component in a complete culture environment for the growth of human epidermal melanocytes. The kit contains Melanocyte Basal Medium, Product No. M 1669, and Melanocyte Medium Supplement, Product No. M 1794. The Melanocyte Basal Medium must be supplemented with the Melanocyte Medium Supplement to fully support plating and proliferation of melanocytes.

Melanocyte Basal Medium is a modified version of MCDB 151 and MCDB 104 which contains essential and non-essential amino acids, vitamins, trace minerals, organic compounds, and inorganic salts. It is HEPES and bicarbonate buffered. Melanocyte Basal Medium contains no hormones, growth factors or other proteins and does not contain antibiotics or antimycotics.

Melanocyte Medium Supplement is a sterile, concentrated (100x) solution. It contains all of the supplements necessary for the growth of human epidermal melanocytes when added to Melanocyte Basal Medium. Each tube (1 ml or 5 ml) of Melanocyte Medium Supplement contains bovine pituitary extract (BPE), fetal bovine serum, bovine insulin, bovine transferrin, basic fibroblast growth factor, hydrocortisone, heparin, and phorbol 12-myristate 13-acetate (PMA).

Preparation of Supplemented Medium
Melanocyte Basal Medium is shipped frozen. When the medium is thawed it may contain a precipitate. The precipitate will dissolve and disappear after the medium is completely thawed and mixed thoroughly. We recommend the following procedure for thawing Melanocyte Basal Medium:

1. Thaw Melanocyte Basal Medium at room temperature overnight. If more rapid thawing is desired, thaw the medium in a water bath at 37 °C. Remove the medium from the water bath when a small amount of ice remains in the bottle. During the thawing procedure, cover the medium to protect it from the light.
2. After the medium has thawed (or when a small amount of ice remains), ensure that the cap to the bottle is tight and swirl the medium to insure a homogeneous solution.

The formation and re-dissolving of the precipitate will not affect the performance of the medium. Simply add the appropriate amount of Melanocyte Medium Supplement and you are ready to culture your cells.

3. Thaw one tube of Melanocyte Medium Supplement. Vortex the tube; avoid causing the solution to foam.
4. Wipe the outside of the containers with a disinfecting solution such as 70% ethanol.
5. In a laminar flow culture hood using sterile technique, transfer the entire contents of the tube of Melanocyte Medium Supplement to the bottle of Melanocyte Basal Medium.
6. Tightly cap the bottle of supplemented medium and swirl the contents to insure a homogeneous solution. Yields 100 ml or 500 ml of complete medium.

Product Use
Melanocyte Medium Kit is intended for use in the routine culture of melanocytes for research purposes. Supplemented Melanocyte Basal Medium will support the plating and proliferation of melanocytes at varying culture densities from 1000 cells/cm² to high density (1 x 10⁵ cells/cm²). Additional applications for use may include primary isolation of melanocytes from skin. It is intended for use in a 5% CO₂ incubator and when equilibrated in this atmosphere has a pH of 7.4.
**Product Storage**

Melanocyte Medium Kit is shipped frozen and should be stored at −20 °C. Once completely thawed, Melanocyte Basal Medium should be stored at 2-8 °C in the dark, do not refreeze. Melanocyte Basal Medium is stable at 2-8 °C in the dark for up to 3 months. Melanocyte Medium Supplement should be stored at −20 °C. Complete medium may be stored at 2-8 °C for up to 1 month in the dark.

Deterioration of the liquid medium may be recognized by any or all of the following: [1] pH change, [2] precipitate or particulate matter throughout the solution, [3] cloudy appearance [4] color change. The nature of supplements added may affect storage conditions and shelf life of the medium. Product labels bear expiration date.

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