Oligodendrocyte Precursor Cell Differentiation Supplement (OPCDS)

Catalog Number: 1672

Product Description

Oligodendrocyte Precursor Cell Differentiation Supplement (OPCDS) is a medium supplement designed for the optimal differentiation of normal human oligodendrocyte precursor cells *in vitro*. It is a sterile, concentrated (100X) solution which contains growth factors, hormones, and proteins necessary for the culture of normal human oligodendrocytes. The supplement is formulated (quantitatively and qualitatively) to provide a defined and optimally balanced growth environment that maximally promotes the differentiation of normal human oligodendrocyte precursor cells *in vitro*. The supplement is designed as an additive for oligodendrocyte precursor cell differentiation medium (OPCDM, Cat. No. 1631) and should be used in conjunction with that medium.

Components

OPCDS is packaged in the quantity of supplement suited for a 500 ml bottle of OPCDM. When a 500 ml bottle of OPCDM is supplemented with OPCDS, the final concentrations of the supplement components per milliliter will be BSA 10 µg, apo-transferrin 10 µg, insulin 5 µg, dcAMP 10 µg, FGF-2 2 ng, IGF-1 2 ng, PDGF-AA 2 ng, IGF-I 10 ng/ml, hydrocortisone 1 µg, progesterone 20 nM, RA 10^{-6} M and T_3 60 nM.

Product Use

OPCDS is for research use only. It is not approved for human or animal use, or for application in *in vitro* diagnostic procedures.

Storage

Store OPCDS at -20°C before adding to oligodendrocyte precursor cell medium.

Shipping

Dry ice.

Prepare for use

Thaw OPCDS at 37°C. Gently tilt the OPCDS tube several times during thawing to help the contents dissolve. Make sure the contents of the supplement are completely dissolved into solution before adding to the medium. Rinse the bottle and tubes with 70% ethanol, and then wipe to remove excess. Remove the cap, being careful not to touch the interior threads with fingers. Add OPCDS and other components (FBS and P/S solution) into medium in a sterile field, mix well and then the reconstituted medium is ready for use. Since several components of OPCDM are light-labile, it is recommended that the medium not be exposed to light for lengthy periods of time. If the medium is warmed prior to use, do not exceed 37°C. When stored in the dark at 4°C, the reconstituted medium is stable for one month.

Caution: If handled improperly, some components of the medium may present a health hazard. Take appropriate precautions when handling it, including the wearing of protective clothing and eyewear. Dispose of properly.