



Neuronal Precursor Cell Differentiation Supplement (NPCDS)

Catalog Number: 1572

Product Description

Neuronal Precursor Cell Differentiation Supplement (NPCDS) is a medium supplement designed for the optimal differentiation of normal human neuronal precursors *in vitro*. It is a sterile, concentrated (100X) solution which contains growth factors, hormones, and proteins necessary for the culture of normal human neurons. The supplement is formulated (quantitatively and qualitatively) to provide a defined and optimally balanced growth environment that maximally promotes the differentiation of normal human neurons *in vitro*. The supplement is designed as an additive for neuronal precursor cell differentiation medium (NPCDM, Cat. No. 1531) and should be used in conjunction with that medium.

Components

NPCDS is packaged in the quantity of supplement suited for a 500 ml bottle of NPCDM. When a 500 ml bottle of NPCDM is supplemented with NPCDS, the final concentrations of the supplement components per milliliter will be 100 ug BSA, 2.5 ug/mL catalase, 1 ug/mL glutathione (reduced), 4 ug/mL insulin, 0.0026 uM T3, 2 ug/mL L-Carnitine, 16 uM Ethanolamine, 15 ug/mL galactose, 16.1 ug/mL Putrescine, 0.01435 ug/mL Sodium Selenite, 0.02 ug/mL Corticosterone, 0.02 uM Progesterone, 3.5 nM Linoleic Acid, 1 ug/mL linolenic acid, 0.2 uM Lipoic Acid, 0.01 ug/mL Retinyl acetate, 0.1 ug/mL D,L-alpha-tocopherol acetate, and 0.1% ethanol.

Product Use

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

Storage

Store NPCDSS at -20°C before adding to neuronal medium.

Shipping

Dry ice.

Prepare for use

Thaw NPCDS at 37°C. Gently tilt the NPCDS 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 NPCDS and other components (P/S solution, FBS) into medium in a sterile field, mix well and then the reconstituted medium is ready for use. Since several components of NPCDM 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.