

# **Mesenchymal Stem Cell Chondrogenic Differentiation Supplement**(MCDS)

Catalog Number: 7582

## **Product Description**

Mesenchymal Stem Cell Chondrogenic Differentiation Supplement (MCDS) is a medium supplement designed for differentiation of primary mesenchymal stem cells (MSCs) to an chondrogenic lineage as determined by Safranin-O staining *in vitro*. It is a sterile, concentrated (100X) solution. The supplement is designed as an additive for mesenchymal stem cell chondrogenic differentiation medium (MCDM, Cat. No. 7551) and should be used in conjunction with that medium.

## **Components**

MCDS is packaged in the quantity of supplement suited for mesenchymal stem cell chondrogenic differentiation medium. MCDS contains growth factors, hormones, and proteins necessary for MSCs differentiation.

#### **Product Use**

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

## **Storage**

Store the MCDS at -20°C before adding to basal medium.

#### Shipping

Dry ice.

#### Prepare for use

Thaw MCDS at 37°C. Gently tilt the MCDS 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 MCDS, P/S solution and TGF-β3, which is provided by the customer, into basal medium in a sterile field, mix well and then the reconstituted medium is ready for use. Since several components of differentiation medium 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.