



## Mesenchymal Stem Cell Osteogenic Differentiation Supplement (MODS)

Catalog Number: 7532

### Product Description

Mesenchymal Stem Cell Osteogenic Differentiation Supplement (MODS) is a medium supplement designed for differentiation of primary mesenchymal stem cells (MSCs) to an osteogenic lineage as determined by Alizarin Red staining *in vitro*. It is a sterile, concentrated (100X) solution which contains growth factors, hormones, and proteins necessary for MSCs differentiation. The supplement is designed as an additive for mesenchymal stem cell osteogenic differentiation medium (MODM, Cat. No. 7531) and should be used in conjunction with that medium.

### Product Use

MODS 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 MODS at -20°C before adding to basal medium.

### Shipping

Dry ice.

### Prepare for use

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