



## Mesenchymal Stem Cell Adipogenic Differentiation Supplement (MADS)

Catalog Number: 7542

### Product Description

Mesenchymal Stem Cell Adipogenic Differentiation Supplement (MADS) contains reagents that readily differentiate primary mesenchymal stem cells (MSCs) to an adipogenic lineage as assessed by Oil Red O staining *in vitro*. It is a sterile, concentrated (100X) solution which contains growth factors, hormones, and proteins necessary for MSCs adipogenic differentiation. The supplement is designed as an additive for mesenchymal stem cell adipogenic differentiation medium (MADM, Cat. No. 7541) and should be used in conjunction with that medium.

### Components

MADS is packaged in the quantity of supplement suited for mesenchymal stem cell adipogenic differentiation medium. When a bottle of MADM is supplemented with MADS, the final concentrations of the supplement components will be BSA 10 µg/ml, apo-transferrin 10 µg/ml, insulin 5 µg/ml, FGF 1 ng/ml, IGF-1 1 ng/ml, dexamethasone 1 uM, IBMX 200 uM, indomethacin 100 uM and T<sub>3</sub> 1 nM.

### Product Use

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

### Shipping

Dry ice.

### Prepare for use

Thaw MADS at 37°C. Gently tilt the MADS 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 MADS 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 MADM 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.*