Mesenchymal Stem Cell Medium (MSCM)
Catalog #7501

Product Description
Mesenchymal Stem Cell Medium (MSCM), when used with Mesenchymal Stem Cell Growth Supplement (MSCGS, Cat #7552) and 25 ml of fetal bovine serum (FBS) is a complete medium designed for optimal growth of normal mesenchymal stem cells in vitro. It is a sterile, liquid medium which contains essential and non-essential amino acids, vitamins, organic and inorganic compounds, hormones, growth factors, trace minerals and a low concentration of fetal bovine serum (5%). The medium is HEPES and bicarbonate buffered and has a pH of 7.4 when equilibrated in an incubator with an atmosphere of 5% CO₂/95% air. The medium is formulated (quantitatively and qualitatively) to provide an optimally balanced nutritional environment that selectively supports the growth of normal mesenchymal stem cells in vitro.

Components
MSCM consists of 500 ml of basal medium, 25 ml of FBS (Cat. #0025), 5 ml of Mesenchymal Stem Cell Growth Supplement (MSCGS, Cat. #7552) and 5 ml of penicillin/streptomycin solution (P/S, Cat. #0503). Note: FBS, MSCGS and P/S are not pre-mixed in MSCM; they must be added separately to make the complete MSCM.

Product Use
MSCM 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 basal medium at 4°C and the MSCGS, FBS and P/S solution at -20°C. Protect from light.

Shipping

Instructions for Use
Thaw MSCGS, FBS and P/S solution at 37°C. Gently tilt the tubes several times to ensure the contents are completely mixed before adding to the medium. Spray the medium bottle and tubes with 70% ethanol, and wipe to remove excess liquid. In a sterile field, remove the caps without touching the interior threads with fingers. Add MSCGS, FBS and P/S solution to the medium and mix well. Since several components are light-labile, the medium should not be exposed to light for extended periods. We do not recommend warming medium in a 37°C water bath prior to use. 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.