

Macrophage Medium (MaM) Catalog Number: 1921

Product Description

Macrophage Medium (MaM) is a complete medium designed for optimal growth of normal bone marrow-derived macrophages *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 bicarbonate buffered and has a pH of 7.4 when equilibrated in an incubator with an atmosphere of 5% $CO_2/95\%$ air. The medium is formulated (quantitatively and qualitatively) to provide a defined and optimally balanced nutritional environment that selectively promotes growth of normal macrophages *in vitro*.

Components

MaM consists of 425 ml of basal medium, 25 ml of fetal bovine serum (FBS, Cat. No. 0025), 50 ml of macrophage growth supplement (MaGS, Cat. No. 1972) and 5 ml of penicillin/streptomycin solution (P/S, Cat. No. 0503).

Product Use

<u>MaM is for research use only</u>. 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, the MaGS, the FBS and the P/S solution at -20°C. Protect from light.

Shipping

Gel ice.

Prepare for use

Thaw MaGS, FBS and P/S solution at 37°C. Gently tilt the MaGS 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 MaGS, 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 this 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.