

# STEMium<sup>TM</sup> Human Pluripotent Stem Cell Growth Medium-Xeno Free (STEMium-xf<sup>TM</sup>)

Catalog Number: 5811

## **Product Description**

STEMium-xf<sup>TM</sup> is a xeno-free medium designed for optimal growth of human embryonic stem cells and induced pluripotent stem cells under feeder-free conditions. It is a sterile, liquid medium containing essential and non-essential amino acids, vitamins, organic and inorganic compounds, hormones, growth factors and trace minerals. It is made with synthetic, plant-derived, and human-derived components and is free of bovine and other animal-derived components. The medium is bicarbonate buffered and has a pH of 7.4 when equilibrated in an incubator with an atmosphere of 5% CO2/95% air. STEMium<sup>TM</sup> is formulated (quantitatively and qualitatively) to provide an optimally balanced nutritional environment that selectively promotes growth of normal human embryonic stem cells and induced pluripotent stem cells *in vitro*. This medium should be used in conjunction with Geltrex<sup>TM</sup> or BD Matrigel<sup>TM</sup> for feeder-free culture conditions.

## **Components**

STEMium-xf<sup>TM</sup> consists of 500 ml of STEMium-xf<sup>TM</sup> basal medium and 10 ml of StemGS-xf® 50X human pluripotent stem cell growth supplement (Cat. No. 5862).

## **Product Use**

STEMium- $xf^{TM}$  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 and complete STEMium-xf<sup>TM</sup> at 4°C. Store StemGS-xf® 50X at -20°C. Protect from light.

## **Shipping**

Dry ice.

#### Prepare for use

Thaw STEMium-xf<sup>TM</sup> and StemGS-xf® 50X at room temperature. Gently tilt the StemGS-xf® 50X tube several times during thawing to help the contents dissolve. Make sure the contents of the StemGS-xf® 50X are completely dissolved into solution before adding to the STEMium-xf<sup>TM</sup> basal 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 StemGS-xf® 50X solution into STEMium-xf<sup>TM</sup> basal medium using sterile techniques, mix well and then the reconstituted medium is ready for use. Since several components of StemGS-xf® 50X are light-labile, it is recommended that the medium not be exposed to light for extended

periods of time. If the medium is warmed prior to use, do not exceed  $37^{\circ}$ C. When stored in the dark at  $4^{\circ}$ C, complete STEMium-xf<sup>TM</sup> is stable for two weeks.

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.