



**STEMium™ Human Pluripotent Stem Cell Growth Medium-animal  
component free  
(STEMium-acf™)  
Catalog Number: 5821**

**Product Description**

STEMium-acf™ is a animal component 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 and plant-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% CO<sub>2</sub>/ 95% air. STEMium™ is formulated (quantitatively and qualitatively) to provide an optimally balanced nutritional environment that selectively promotes growth of normal human pluripotent stem cells *in vitro*. This medium should be used in conjunction with Geltrex™ or BD Matrigel™ for feeder-free culture conditions.

**Components**

STEMium-acf™ consists of 500 ml of STEMium-acf™ basal medium and 10 ml of StemGS-acf® 50X human pluripotent stem cell growth supplement (Cat. No. 5872).

**Product Use**

STEMium-acf™ 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-acf™ at 4°C. Store StemGS-acf® 50X at -20°C. Protect from light.

**Shipping**

Dry ice.

**Prepare for use**

Thaw STEMium-acf™ and StemGS-acf® 50X at room temperature. Gently tilt the StemGS-acf® 50X tube several times during thawing to help the contents dissolve. Make sure the contents of the StemGS-acf® 50X are completely dissolved into solution before adding to the STEMium-acf™ 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-acf® 50X solution into STEMium-acf™ basal medium using sterile techniques, mix well and then the reconstituted medium is ready for use. Since several components of StemGS-acf® 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°C. When stored in the dark at 4°C, complete STEMium-acf™ 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.*