



## Product Information

### hESC-Sure™ Serum- and Feeder-Free Medium (SFFM)

Catalog Number: ASM-5010 Size: 100 mL

Application: feeder/serum-free hESC culture

This product is for research use only

**Background:** Traditionally, human embryonic stem cell (hESC) culture requires the support of mouse embryonic fibroblast (MEF) cells, which makes the protocol complicated. Our Serum- and Feeder-free medium (SFFM) for hESC culture contains all the growth factors needed, other than bFGF, eliminating the routine preparation of feeder. It is a ready-to-use product for a serum/feeder-free system. hESC culture becomes more efficient and consistent with our SFFM.

**Product description:** 100 mL of hESC-Sure™ Serum- and Feeder-free medium (1×) for the proliferation of pluripotent hESC culture in a serum/feeder-free system. Every batch of the medium has been tested for hES/iPS cells pluripotency. Simply add 20 ng/ml of bFGF and it is ready for use.

**Source:** Chemical plus growth factors

**Storage:** -80°C; or 4°C upon thawing and addition of bFGF

**Shipping:** Ship in dry ice

#### Recommended usage procedure:

1. Coat culture dish with Matrigel (BD Biosciences Cat# 354277), per manufacturer's instruction.
2. Wash Matrigel coated dishes with DMEM/F12 medium (Applied StemCell Cat# ASM-5002).
3. Once hESCs grow confluent or cultured for more than 5 days, dissociate colonies off the bottom of the container with cell scraper.
4. Collect the cells in a 15 ml or 50 ml falcon tube, centrifuge at 300 g (i.e. 1000 rpm for Sorvell H1000B) for 5 minutes at room temperature.
5. Resuspend hESC pellet in hESC-Sure™ SFFM supplemented with 20 ng/ml bFGF.

#### References:

1. Ji J, Zhong B and Bhatia M. Genetic Approaches in Human Embryonic Stem Cells and Their Derivatives. *Principles of regenerative medicine*, Anthony Atala et al edit, (2008) 190-210.
2. Lu J, Hou R, Booth CJ, Yang S-H, Snyder M. Defined culture conditions of human embryonic stem cells. *Proc Natl Acad Sci U S A*. 2006 Apr 11;103(15):5688-93.

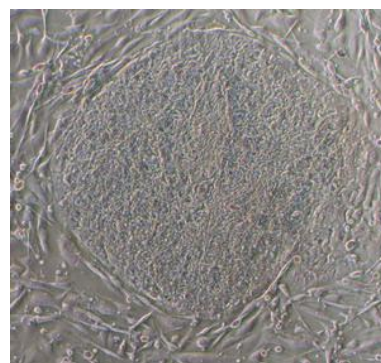


Figure 1 hESC on the feeder cells



Figure 2 hESC in the SFFM

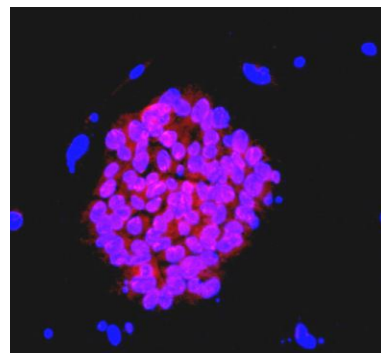


Figure 3 Oct4 staining of hESCs grew for 5 passages in SFFM