### PRODUCT DESCRIPTION

TeSR<sup>™</sup>-E8<sup>™</sup> is a highly defined feeder-free culture medium for human embryonic stem (ES) cells and human induced pluripotent stem (iPS) cells. It is based on the E8 formulation<sup>1-2</sup> published by Dr. James Thomson (University of Wisconsin-Madison), the lead researcher behind the mTeSR<sup>™</sup>1 formula<sup>3-4</sup>. TeSR<sup>™</sup>-E8<sup>™</sup> contains a minimized set of the components required for maintenance of human ES and iPS cells, providing a simpler medium for the culture of pluripotent stem cells. This medium is low in protein compared to other conventional feeder-free culture medium such as mTeSR<sup>™</sup>1 (Catalog #05850) and TeSR<sup>™</sup>2 (Catalog #05860).

### RECOMMENDED FOR

TeSR<sup>™</sup>-E8<sup>™</sup> is ideal for maintaining human ES and iPS cells in a low protein, feeder-free environment. This medium may be used with either Vitronectin XF<sup>™</sup> (Catalog #07180) or BD Matrigel<sup>™</sup> hESC-qualified matrix (BD Catalog #354277) as the culture matrix.

#### COMPONENTS

05941 TeSR™-E8™ Basal Medium	474 mL
05942 TeSR™-E8™ 20X Supplement	25 mL
05943 TeSR™-E8™ 500X Supplement	1 mL
05945 TeSR™-E8™ Complete Medium Bottle	bottle

These products have been aseptically manufactured using tightly controlled processes and extensively pre-screened components. Each batch is sterility tested.

# STABILITY AND STORAGE

Record the LOT number for each component. Do not aliquot the components.

### 05941 TeSR™-E8™ Basal Medium

Product stable at 2 - 8°C for 1 year from date of manufacture as indicated on label.

#### 05942 TeSR™-E8™ 20X Supplement

Product stable at -20°C for 1 year from date of manufacture as indicated on label.

## 05943 TeSR™-E8™ 500X Supplement

Product stable at -20°C for 1 year from date of manufacture as indicated on label.

### **REFERENCES**

- Chen G, et al. Chemically defined conditions for human iPSC derivation and culture. Nat Methods 8(5): 424-429, 2011
- Beers J, et al. Passaging and colony expansion of human pluripotent stem cells by enzyme-free dissociation in chemically defined culture conditions. Nat Protoc 7(11): 2029-40, 2012
- Ludwig TE, et al. Derivation of human embryonic stem cells in defined conditions. Nat Biotechnol 24(2): 185-187, 2006
- 4. Ludwig TE, et al. Feeder-independent culture of human embryonic stem cells. Nat Methods 3(8): 637-646, 2006



TeSR™-E8™

Low Protein
Maintenance Medium
for Human
ES Cells and iPS Cells

CATALOG #05940

1 Kit

## PREPARATION OF TeSR™-E8™ MEDIUM

Use sterile techniques when preparing complete TeSR™-E8™ medium. Instructions given in this section are for preparing 500 mL of TeSR™-E8™ medium.

Prepare complete TeSR $^{\text{TM}}$ -E8 $^{\text{TM}}$  medium in the TeSR $^{\text{TM}}$ -E8 $^{\text{TM}}$  Complete Medium Bottle. Do not use other containers. Store complete TeSR $^{\text{TM}}$ -E8 $^{\text{TM}}$  medium at 2 - 8 $^{\circ}$ C and use within 2 weeks.

- Thaw TeSR™-E8™ 20X Supplement and TeSR™-E8™ 500X Supplement at room temperature (15 - 25°C) or at 2 - 8°C just prior to use. Do not thaw supplements in a 37°C water bath.
- Add the entire 474 mL of TeSR™-E8™ Basal Medium to the TeSR™-E8™ Complete Medium Bottle.
- Pipette the entire 25 mL of thawed TeSR™-E8™ 20X Supplement and the entire 1 mL of thawed TeSR™-E8™ 500X Supplement to the TeSR™-E8™ Complete Medium Bottle, for a total volume of 500 mL. Mix well.

If prepared using sterile techniques, complete TeSR™-E8™ medium is ready for use and does not require filtering.

Complete TeSR<sup>TM</sup>-E8<sup>TM</sup> medium (freshly prepared) may be stored at -20°C in the TeSR<sup>TM</sup>-E8<sup>TM</sup> Complete Medium Bottle or alternatively aliquots can be stored in 50 mL polypropylene tubes (e.g. BD Catalog #352070) or Corning Square Polycarbonate Storage Bottles (Corning Catalog #431430 [125 mL]; #431431 [250 mL]). Store frozen medium for up to 1 month. Once thawed, use medium within 1 week. Do not refreeze medium.

### **DIRECTIONS FOR USE**

For complete instructions on how to use TeSR™-E8™ medium see the Technical Manual: Maintenance of Human Pluripotent Stem Cells in TeSR™-E8™ (Document #29267) available on our website at www.stemcell.com or contact us to request a copy.

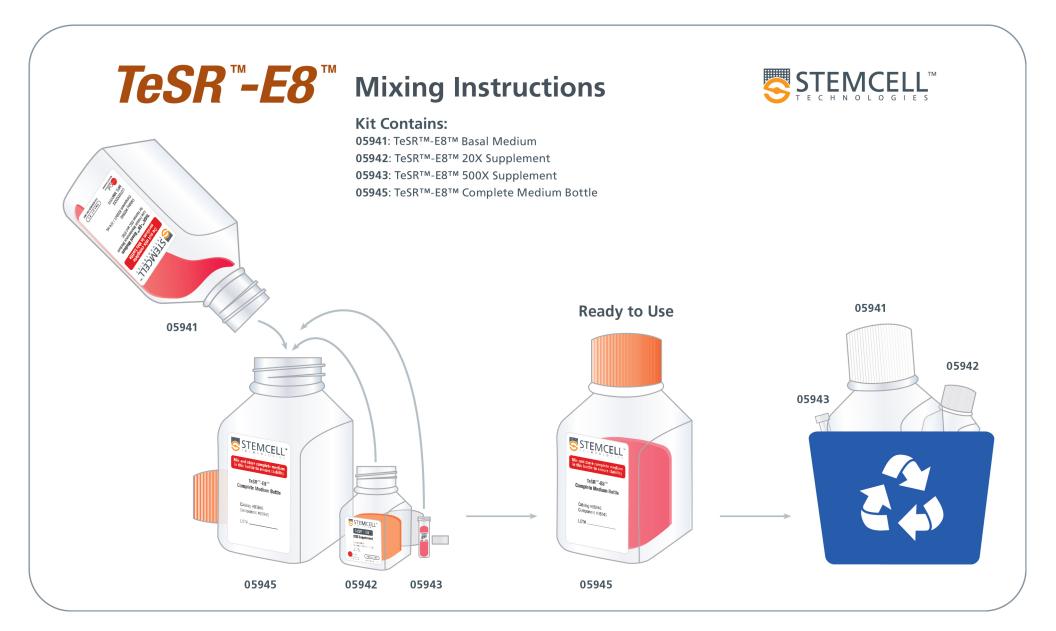


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