

# TeSR™-E8™

**Feeder-free, animal component-free culture medium for maintenance of hESCs and hiPSCs**

Catalog #05990

1 Kit



Scientists Helping Scientists™ | [WWW.STEMCELL.COM](http://WWW.STEMCELL.COM)

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto:TECHSUPPORT@STEMCELL.COM)

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

## Product Description

TeSR™-E8™ is a feeder-free, animal component-free culture medium for human embryonic stem cells (hESCs) and induced pluripotent stem cells (hiPSCs; e.g. Healthy Control Human iPSC Line, Female, SCTi003-A, Catalog #200-0511). 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™1 formula<sup>3-4</sup>. TeSR™-E8™ contains a minimal set of the components required for maintenance of hESCs and hiPSCs, providing a simpler medium for the culture of pluripotent stem cells. This medium lacks albumin, so it is low in protein compared to other conventional feeder-free culture media such as mTeSR™1 (Catalog #85850), TeSR™-AOF (Catalog #100-0401), and mTeSR™ Plus (Catalog #100-0276).

TeSR™-E8™ may be used with either Vitronectin XFT™ (Catalog #07180, a matrix developed and manufactured by Nucleus Biologics) or Corning® Matrigel® hESC-Qualified Matrix (Corning Catalog #354277) as the culture matrix.

Each lot of TeSR™-E8™ 25X Supplement is used to prepare complete TeSR™-E8™ medium and then performance-tested in a culture assay using human pluripotent stem cells (hPSCs).

## Product Information

The following components are sold as a complete kit (Catalog #05990) and are not available for individual sale.

COMPONENT NAME	COMPONENT #	SIZE	STORAGE	SHELF LIFE
TeSR™-E8™ Basal Medium	05991	480 mL	Store at 2 - 8°C.	Stable for 2 years from date of manufacture (MFG) on label.
TeSR™-E8™ 25X Supplement	05992	20 mL	Store at -20°C.	Stable for 2 years from date of manufacture (MFG) on label.

Please refer to the Safety Data Sheet (SDS) for hazard information.

## Preparation of Complete TeSR™-E8™ Medium

Use sterile technique to prepare complete TeSR™-E8™ medium (TeSR™-E8™ Basal Medium + TeSR™-E8™ 25X Supplement). The following example is for preparing 500 mL of complete medium. If preparing other volumes, adjust accordingly.

1. Thaw TeSR™-E8™ 25X Supplement at room temperature (15 - 25°C) or overnight at 2 - 8°C. Do not thaw in a 37°C water bath. Mix thoroughly.

NOTE: Once thawed, use supplement immediately. Do not re-freeze.

2. Add (pipette) 20 mL of TeSR™-E8™ 25X Supplement to 480 mL of TeSR™-E8™ Basal Medium. Mix thoroughly.

NOTE: If not using immediately, store complete TeSR™-E8™ medium in one of the following containers:

- TeSR™-E8™ Basal Medium bottle
- 50 mL polypropylene tubes (e.g. Catalog #100-0090)

Do not use other storage containers.

3. Store complete medium at 2 - 8°C for up to 2 weeks. Alternatively, aliquot and store at -20°C for up to 6 months. Do not exceed the shelf life of the individual components. After thawing the aliquoted complete medium, use immediately or store at 2 - 8°C for up to 2 weeks. Do not re-freeze.

NOTE: Thaw complete medium at room temperature or overnight at 2 - 8°C. Do not thaw in a 37°C water bath.

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

## Directions for Use

For complete instructions on maintaining hESCs and hiPSCs in TeSR™-E8™, refer to the Technical Manual: Maintenance of Human Pluripotent Stem Cells in TeSR™-E8™ (Document #10000005516), available at [www.stemcell.com](http://www.stemcell.com), or contact us to request a copy.

## References

1. Chen G et al. (2011) Chemically defined conditions for human iPSC derivation and culture. *Nat Methods* 8(5): 424–9.
2. Beers J et al. (2012) Passaging and colony expansion of human pluripotent stem cells by enzyme-free dissociation in chemically defined culture conditions. *Nat Protoc* 7(11): 2029–40.
3. Ludwig TE et al. (2006) Derivation of human embryonic stem cells in defined conditions. *Nat Biotechnol* 24(2): 185–7.
4. Ludwig TE et al. (2006) Feeder-independent culture of human embryonic stem cells. *Nat Methods* 3(8): 637–46.



This product was developed under license to intellectual property owned by WiCell™ Research Institute.

This product is sold for research use only (whether the buyer is an academic or for-profit entity) under a non-transferable, limited-use license. Purchase of this product does not include the right to sell, use or otherwise transfer this product for commercial purposes (i.e., any activity undertaken for consideration, such as use of this product for manufacturing, or resale of this product or any materials made using this product, or use of this product or any materials made using this product to provide services) or clinical use (i.e., administration of this product or any material using this product to humans) or the right to implant any material made using this product into an animal by, or in collaboration with, a for-profit entity, for purposes other than basic pre-clinical research applications (including without limitation teratoma assays) to validate the function of the cells. Purchasers who do not agree to the terms and conditions set forth above should return the product in acceptable conditions to the seller for a refund.

PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED. FOR ADDITIONAL INFORMATION ON QUALITY AT STEMCELL, REFER TO [WWW.STEMCELL.COM/COMPLIANCE](http://WWW.STEMCELL.COM/COMPLIANCE).

Copyright © 2026 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, and Scientists Helping Scientists are trademarks of STEMCELL Technologies Canada Inc. E8, mTeSR, and TeSR are trademarks of WARF. Corning and Matrigel are registered trademarks of Corning Incorporated. Vitronectin XF is developed and manufactured by Nucleus Biologics and Vitronectin XF is a trademark of Nucleus Biologics. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.