STEMdiff™ APEL™2 Medium

Defined, animal component-free medium for differentiation of human ES and iPS cells to multiple lineages

Catalog #	05270	100 mL
	05275	500 mL

STEMCELL™ TECHNOLOGIES
Scientists Helping Scientists™ | WWW.STEMCELL.COM
TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Product Description

STEMdiff™ APEL™2 Medium is a fully defined, serum-free, and animal component-free medium for the differentiation of human embryonic stem (ES) cells and induced pluripotent stem (iPS) cells. It is based on the APEL formulation published by Dr. Andrew Elefanty (Ng et al.) and lacks undefined components such as protein-free hybridoma medium. This medium can be used in adherent or embryoid body (EB)-based protocols, such as those using AggreWell™400 (Catalog #34421). Appropriate induction factors must be added before use.

- Compatible with TeSR™-cultured human ES and iPS cells
- Compatible with adherent or EB culture differentiation protocols
- Capable of supporting endoderm, mesoderm and ectoderm differentiation, when specific cytokines or induction factors are added

Properties

Storage: Store at -20°C.
Shelf Life: Stable until expiry date (EXP) on label.

Handling / Directions For Use

Thaw STEMdiff™ APEL™2 Medium at room temperature (15 - 25°C) or at 2 - 8°C.
NOTE: Once thawed, store medium at 2 - 8°C for up to 2 weeks. Alternatively, aliquot and store at -20°C until expiry date on the label. Avoid additional freeze-thaw cycles.
NOTE: If required for specific applications, protein-free hybridoma medium (e.g. Gibco® PFHM-II, Thermo Fisher Catalog #12040077) can be added to the thawed medium by adding 5 mL of protein-free hybridoma medium to 100 mL of STEMdiff™ APEL™2 Medium.

STEMdiff™ APEL™2 Medium is compatible with ES and iPS cells cultured in mTeSR™1 (Catalog #85850), TeSR™2 (Catalog #05860), and TeSR™-E8™ (Catalog #05990). For complete instructions on maintaining high quality human pluripotent stem cells for use in differentiation, refer to the Technical Manuals: Maintenance of Human Pluripotent Stem Cells in mTeSR™1 (Document #28315), TeSR™2 (Document #28210), or TeSR™-E8™ (Document #DX20809), available at www.stemcell.com or contact us to request a copy.

For complete instructions on generating EBs from human pluripotent stem cells using AggreWell™ plates, refer to the Product Information Sheet for AggreWell™ 400 (Document #DX21732) or AggreWell™ 800 (Document #DX21397), available at www.stemcell.com or contact us to request a copy.

Notes and Tips

RELATED PRODUCTS
For related products, including specialized cell culture and storage media, matrices, antibodies, cytokines, and small molecules, visit www.stemcell.com/hPSCworkflow or contact us at techsupport@stemcell.com.

References

Ng ES et al. (2008) A protocol describing the use of a recombinant protein-based, animal product-free medium (APEL) for human embryonic stem cell differentiation as spin embryoid bodies. Nat Protoc 3(5): 768–76.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2019 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, AggreWell, APEL, and STEMdiff are trademarks of STEMCELL Technologies Canada Inc. E8, mTeSR, and TeSR are trademarks of WARF. Gibco is a registered trademark of Life Technologies Corporation. 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.