

# STEMdiff™ APEL™ Medium

## Serum-Free, Animal Component-Free Medium for Differentiation of Human ES and iPS Cells to Multiple Lineage Types

Catalog # 05210

100 mL



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FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

## Product Description

STEMdiff™ APEL™ Medium is a serum-free, animal component-free medium for differentiation of human embryonic stem (ES) cells and induced pluripotent stem (iPS) cells. It is based on the APEL formulation published by Ng et al. This medium can be used in adherent or embryoid body (EB)-based protocols, such as with AggreWell™ plates (Catalog #27845). Appropriate induction factors must be added before use.

- Compatible with adherent or EB culture differentiation protocols
- Compatible with mTeSR™1- and TeSR™2-cultured ES and iPS cells
- Capable of supporting endoderm, mesoderm and ectoderm differentiation, when specific cytokines or inducing factors are added

## Properties

Storage: Store at -20°C.

Shelf Life: Stable until expiry date (EXP) on label.

Contains: This product is animal component-free.

## Handling / Directions For Use

Thaw STEMdiff™ APEL™ Medium at room temperature (15 - 20°C) or at 2 - 8°C.

NOTE: Once thawed, store medium at 2 - 8°C for up to two weeks. Alternatively, aliquot and store at -20°C until expiry date on the label. Avoid additional freeze-thaw cycles.

STEMdiff™ APEL™ Medium can be used as a basal medium for a variety of human pluripotent stem cell differentiation protocols. For examples of differentiation protocols in which STEMdiff™ APEL™ Medium has been used, please contact STEMCELL Technical Support at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

STEMdiff™ APEL™ Medium is compatible with ES and iPS cells cultured in mTeSR™1 (Catalog #05850) and TeSR™2 (Catalog #05860). For complete instructions on maintaining high quality human pluripotent stem cells for use in differentiation, refer to the Technical Manual: Maintenance of Human Pluripotent Stem Cells in mTeSR™1 (Document #29106), available on our website at [www.stemcell.com](http://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 Technical Manual: Reproducible and Uniform Embryoid Bodies Using AggreWell™ Plates (Document #29146), available on our website at [www.stemcell.com](http://www.stemcell.com) or contact us to request a copy.

## References

1. Ng ES, et al. 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. *Nature Protocols* 3(5): 768-776, 2008

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