ES-Cult™ M3120

Base methylcellulose medium for in vitro differentiation of mouse ES or iPS cells to hematopoietic or endothelial progenitor cells

Catalog # 03120 40 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

ES-Cult™ M3120 is recommended as a base for the preparation of methylcellulose-based medium for the in vitro differentiation of mouse embryonic stem (ES) or induced pluripotent stem (iPS) cells into hematopoietic or endothelial progenitor cells. When supplemented with the appropriate additional components, ES-Cult™ M3120 can be used for the generation of embryoid bodies (EBs) from undifferentiated mouse ES or iPS cells.

Properties

Storage: Store at -20°C.

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

Contains:
- 2.6% Methylcellulose
- Iscove's MDM

Handling / Directions For Use

NOTE: If product is received partially thawed, place immediately at -20°C or thaw and aliquot as described below.

1. Thaw at room temperature (15 - 25°C) or overnight at 2 - 8°C.
2. Swirl the bottle to mix.
3. Store at 2 - 8°C for up to 1 month. Alternatively, aliquot and store at -20°C. After thawing aliquots, do not refreeze.

For detailed instructions on using ES-Cult™ M3120 methylcellulose-based medium, refer to the Technical Manual: In Vitro Hematopoietic Differentiation of Mouse ES & iPS Cells Using ES-Cult™ (Document #28415), available at www.stemcell.com or contact us to request a copy.

NOTE: ES-Cult™ M3120 methylcellulose medium, supplemented with the appropriate additional components, can be used for the generation of EBs from undifferentiated ES or iPS cells. It is necessary to establish the linear relationship between the number of undifferentiated ES/iPS cells plated and the number of EBs generated. The numbers and types of myeloid and erythroid (primitive and definitive) hematopoietic colonies obtained by secondary plating of dispersed EBs into ES-Cult™ M3120 (supplemented with the appropriate additional components) is dependent on variables such as the cell line used, the length of primary differentiation, and the combination of cytokines used in secondary plating. Variability from published results may arise due to inherent differences amongst various cell lines, or due to variability in the techniques used to maintain the cells in the undifferentiated state. For further information, visit www.stemcell.com or contact us at techsupport@stemcell.com.

References

Helgason CD et al. (1996) Overexpression of HOXB4 enhances the hematopoietic potential of embryonic stem cells differentiated in vitro. Blood 87(7): 2740–9.
Keller G et al. (1993) Hematopoietic commitment during embryonic stem cell differentiation in culture. Mol Cell Biol 13(1): 473–86.