MyeloCult™ M5300

Medium for long-term culture of mouse cells

Catalog #	05300	100 mL
	05350	500 mL

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Product Description

MyeloCult™ M5300 is optimized for the initiation and maintenance of myeloid long-term cultures of mouse hematopoietic cells and stromal cell feeder layers. The sera used in this formulation have been pre-tested and selected for their ability to support long-term myelopoiesis by primitive mouse hematopoietic cells (e.g. in long-term culture-initiating cell [LTC-IC] assays).

MyeloCult™ M5300 requires the addition of freshly prepared Hydrocortisone (Catalog #07904).

Properties

Storage: Store at -20°C.

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

Contains:
- Horse serum
- Fetal bovine serum
- 2-Mercaptoethanol
- Minimum Essential Medium (MEM) Alpha
- Supplements

Handling / Directions For Use

For detailed instructions refer to the Technical Manual: Mouse Long-Term Culture-Initiating Cell (LTC-IC) Assays (Document #28417), available at www.stemcell.com or contact us to request a copy.

1. Thaw MyeloCult™ M5300 medium in refrigerator (2 - 8°C), at room temperature (15 - 25°C), or at 37°C until just thawed. Mix well by swirling.
   NOTE: If not used immediately, store at 2 - 8°C for up to 1 month.
   NOTE: If precipitate or crystals are present after thawing, allow the medium to equilibrate to room temperature (15 - 25°C) or place at 37°C for up to 1 hour and mix well by swirling. If precipitate or crystals persist, centrifuge or filter using a 0.2 - 0.22 µm low protein binding polyethersulfone (PES) filter unit (e.g. Fisher 09-741-04 [0.2 µm, 250 mL]; Fisher SCGP00525 [0.22 µm, 50 mL]).
2. Add freshly prepared and filter-sterilized hydrocortisone to give a final concentration of 10^-6 M.
   NOTE: After addition of hydrocortisone, the medium is stable for up to 1 week when stored at 2 - 8°C.
3. Cultures should be established in tissue culture-treated plasticware to promote cell attachment and adherent layer formation.
   NOTE: During medium changes, care should be taken to avoid disturbing the adherent layer. Do not touch the bottom of the dish when pipetting; instead, rest the pipette against the side of the dish. When dispensing, allow medium to run slowly down the side of the dish rather than directly onto the surface of the adherent layer.

Notes and Tips

RELATED PRODUCTS

For related products, including specialized culture and storage media, supplements, antibodies, cytokines, and small molecules, visit www.stemcell.com/HSPCworkflow or contact us at techsupport@stemcell.com.

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References

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Fraser CC et al. (1990) Expansion in vitro of retrovirally marked totipotent hematopoietic stem cells. Blood 76(6): 1071–6.
Lemieux ME et al. (1995) Characterization and purification of a primitive hematopoietic cell type in adult mouse marrow capable of lymphomyeloid differentiation in long-term marrow “switch” cultures. Blood 86(4): 1339–47.
Miller CL, Dykstra B & Eaves CJ. (2008) Characterization of mouse hematopoietic stem and progenitor cells. Curr Protoc Immunol Chapter 22 Unit 22B.2.
Miller CL & Eaves CJ. (2002) Long-term culture-initiating cell assays for human and murine cells. Methods Mol Med 63: 123–41.