StemSpan™-ACF

Animal component-free medium for culture and expansion of human hematopoietic cells

Catalog # 09855 500 mL

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Product Description

StemSpan™-ACF is an animal component-free medium for the in vitro culture and expansion of human hematopoietic cells. This medium contains recombinant proteins and synthetic components. It does not contain serum or other human- or animal-derived components. Recombinant hematopoietic growth factors, required for the optimal growth and expansion of hematopoietic cells, have not been added to StemSpan™-ACF. This allows users the flexibility to add growth factors and other supplements according to their requirements.

Properties

Storage:	Store at 2 - 8°C.
Shelf Life:	Stable for 12 months from date of manufacture (MFG) on label.
Contains:	This product contains only recombinant proteins and synthetic components.

Handling / Directions For Use

1. Add desired cytokines, growth factors and other components to StemSpan™-ACF and mix well.
   NOTE: Added components and cells in sterile cell culture medium (e.g. Iscove's MDM or DMEM) should not exceed ~10% of total volume.
2. Add cells, mix well, and set up cultures as desired.

ASSESSMENT OF HEMATOPOIETIC CELLS

Assessment of CD34+ cells before and after culture may be performed by flow cytometry using the following fluorochrome-conjugated antibody clones:

- Anti-Human CD34 Antibody, Clone 581 (Catalog #60013) or Clone 563 (Catalog #60119) or Clone 8G12 (Catalog #60121)
- Anti-Human CD45 Antibody, Clone HI30 (Catalog #60018) or Clone 2D1 (Catalog #60123)

Notes and Tips

Selection of an optimal growth factor combination is dependent upon the source and type of cells and the experimental objectives of the researcher. StemSpan™ expansion supplements, described below, are suitable for use with StemSpan™-ACF.

- StemSpan™ CD34+ Expansion Supplement (10X) (Catalog #02691)
  - Culture and expansion of large numbers of human CD34+ progenitor cells
  - Contains: rh SCF, rh TPO, rh IL-3, rh IL-6, rh Flt3 ligand, other additives

- StemSpan™ CC100 (Catalog #02690)
  - Culture and expansion of human hematopoietic cells
  - Contains: rh Flt3 ligand, rh SCF, rh IL-3, rh IL-6

- StemSpan™ CC110 (Catalog #02697)
  - Culture and expansion of human hematopoietic cells
  - Contains: rh Flt3 ligand, rh SCF, rh TPO

- StemSpan™ Erythroid Expansion Supplement (100X) (Catalog #02692)
  - Expansion and lineage-specific differentiation of human CD34+ cells into erythroid progenitor cells
  - Contains: rh SCF, rh IL-3, rh EPO

- StemSpan™ Megakaryocyte Expansion Supplement (100X) (Catalog #02696)
  - Expansion and lineage-specific differentiation of human CD34+ cells into megakaryocyte progenitor cells
  - Contains: rh SCF, rh TPO, rh IL-6, rh IL-9

- StemSpan™ Myeloid Expansion Supplement (100X) (Catalog #02693)
  - Expansion and lineage-specific differentiation of human CD34+ cells into myeloid progenitor cells
  - Contains: rh SCF, rh TPO, rh G-CSF, rh GM-CSF

SCF = Stem cell factor; EPO = Erythropoietin; TPO = Thrombopoietin; rh = recombinant human; IL = interleukin; Flt = fms-like tyrosine kinase

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. For available fresh and cryopreserved peripheral blood, cord blood, and bone marrow products in your region, visit www.stemcell.com/primarycells.