StemSpan™-AOF

cGMP, animal origin-free medium for culture and expansion of human hematopoietic cells

Catalog #100-0130 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

StemSpan™-AOF is an animal origin-free (AOF) medium that has been developed for the in vitro culture and expansion of human hematopoietic cells, when appropriate growth factors and supplements are added. This allows users the flexibility to prepare medium that meets their requirements. StemSpan™-AOF contains only recombinant proteins and synthetic components, and does not contain serum or other human- or animal-derived components.

Using appropriate cytokines, StemSpan™-AOF may be used to expand CD34+ cells isolated from human cord blood, mobilized peripheral blood, or bone marrow samples, or to expand and differentiate lineage-committed progenitor cells to generate populations of myeloid or megakaryocyte progenitor cells.

StemSpan™-AOF is manufactured and tested following relevant cGMPs under a certified quality management system. For additional quality information, refer to www.stemcell.com/compliance.

Properties

Storage: Store at 2 - 8°C. Do not freeze.

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

Contains: This product contains only recombinant human proteins and synthetic components.

Directions for Use

PREPARATION OF COMPLETE MEDIUM

1. Add desired cytokines, growth factors and, optionally, other supplements to StemSpan™-AOF. Mix thoroughly.
   NOTE: Added supplements and cells in sterile cell culture medium should not exceed ~10% of total volume.
2. Add cells, mix thoroughly, and set up cultures as desired.

For a complete list of expansion supplements for use with StemSpan™-AOF, see Notes and Tips.

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)
- Anti-Human CD38 Antibody, Clone AT-1 (Catalog #60131) or Clone HIT2 (Catalog #60014)
- Anti-Human CD90 Antibody, Clone 5E10 (Catalog #60045)

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 recommended for use with StemSpan™-AOF. StemSpan™ expansion supplements are manufactured and tested under a quality management system certified to ISO 9001. Refer to the Product Information Sheet (PIS) for each supplement for recommended cell expansion protocols with StemSpan™ media.

- 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™ 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 granulocytes
  - Contains: rh SCF, rh TPO, rh G-CSF, rh GM-CSF
- StemSpan™ Myeloid Expansion Supplement II (100X) (Catalog #02694)
  - Expansion and lineage-specific differentiation of human CD34+ cells into monocytes
  - Contains: rh Flt3 ligand, rh SCF, rh TPO, rh M-CSF, rh GM-CSF, other additives

SCF = stem cell factor; EPO = erythropoietin; TPO = thrombopoietin; rh = recombinant human; IL = interleukin; Flt = fms-like tyrosine kinase

*These supplements are serum-free and are not manufactured to relevant cGMPs. Their suitability depends on your experimental requirements.

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.