ImmunoCult™-XF T Cell Expansion Medium

Serum-free and xeno-free medium for the expansion of human T cells

Catalog # 10981 500 mL

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Product Description

ImmunoCult™-XF T Cell Expansion Medium is a serum-free and xeno-free medium optimized for the in vitro culture and expansion of human T cells isolated from peripheral blood. Recombinant cytokines, required for the optimal growth and expansion of T cells, have not been added to ImmunoCult™-XF T Cell Expansion Medium. This allows users the flexibility to prepare medium that meets their requirements.

- No need to supplement the medium with serum
- Supports robust T cell expansion at levels comparable to those in serum-containing media
- Maintains similar proportions of CD4/CD8 cells to the start of culture after expansion
- Expanded T cells are able to produce cytokines including IFN-gamma and IL-4
- Use with ImmunoCult™ Human T Cell Activators (Catalog #10970 and 10971) for bead-free activation of T cells

Properties

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

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

This product contains material derived from human plasma. Donors have been tested and found negative for HIV-1 and -2, hepatitis B, and hepatitis C prior to donation. However, this product should be considered potentially infectious and treated in accordance with universal handling precautions.

Handling / Directions For Use

NOTE: If precipitate is observed in the medium, centrifuge or filter using a 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]). This will not affect performance of the medium.

1. Start with purified human T cells at 1 x 10^6 cells/mL in ImmunoCult™-XF T Cell Expansion Medium supplemented with cytokines (e.g. 30 - 100 IU/mL Human Recombinant IL-2; Catalog #78036).
2. Activate human T cells with ImmunoCult™ Human CD3/CD28/CD2 T Cell Activator (Catalog #10970), ImmunoCult™ Human CD3/CD28 T Cell Activator (Catalog #10971), or with other desired reagents. Incubate cells at 37°C and 5% CO_2.
3. Adjust the cell density to 1 x 10^6 cells/mL every 3 - 4 days as needed with the addition of fresh ImmunoCult™-XF T Cell Expansion Medium supplemented with cytokines.
4. For longer-term expansion of human T cells, every 7 - 10 days harvest and resuspend the expanded T cells at 1 x 10^6 cells/mL in fresh culture medium and restimulate with ImmunoCult™ Human CD3/CD28/CD2 T Cell Activator (Catalog #10970), ImmunoCult™ Human CD3/CD28 T Cell Activator (Catalog #10971), or with other desired reagents for activation of T cells.

NOTE: These are general procedures for the handling and use of ImmunoCult™-XF T Cell Expansion Medium. Depending on your experimental objectives, optimization of these procedures (e.g. cell seeding density and cytokine concentration) may be needed for optimal cell growth.

RELATED PRODUCTS

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

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