

SUPERCULTURE L520 Serum-Free Medium for Lymphocyte

Cat#: 6811051/6811071

[Product Name]

L520 Serum-Free Medium for Lymphocyte

[Product Description]

The L520 Serum-Free Medium for Lymphocyte is an upgraded medium developed by Dakewe based on the L500 Serum-Free Medium for Lymphocyte, it can support the culture and expansion of human T cells in serum-free system in vitro. This product is a chemically defined medium, all the compositions of which are produced from cell culture grade materials. This product contains no heterogeneous animal component or serum or any other protein component except albumin, transferrin and insulin and can effectively avoid the influence of serum qualitative variation, serum components and exogenous components on experimental research.

[Model & Specification]

Product Name	Cat. No.	Model	Specification
L520 Serum-Free Medium for Lymphocyte	6811051	No Phenol Red, GMP	1000 mL/bottle
	6811071		2000 mL/bag

[Storage Conditions and Validity Period]

Keep away from light at 2~8°C, keep aseptic, valid for 12 months.

[Directions for Use]

The L520 Serum-Free Medium for Lymphocyte supports the high-density suspension culture of lymphocytes. It supports the suspension culture of lymphocytes with the density of 5×10^5 cells/mL ~ 5×10^6 cells/mL in a static culture container. To ensure sufficient gas exchange of the culture system, the recommended depth of the medium is 1 cm~1.5 cm. The medium also supports the culture of lymphocytes in a bioreactor, and the optimization of the culture procedure should be determined by researchers based on experience.

The L520 Serum-Free Medium for Lymphocyte supports the serum-free culture of human T cells in Peripheral Blood Mononuclear Cell (PBMC), and the addition of autologous plasma, human AB serum, FBS or serum substitutes can significantly improve the cell viability and increase the cell proliferation rate.

Complete medium Preparation

The L520 Serum-Free Medium for Lymphocyte with 1000 IU/mL injectable-grade IL-2 to obtain the complete medium (The optimal concentration of IL-2 from different sources may be different, customers should first perform IL-2 concentration gradient test according to the actual situation. Select the best IL-2 concentration according to the test results).

Isolation, activation and expansion of T cells in PBMC

1. Day 0, isolate PBMC of human peripheral blood in an aseptic condition (it is recommended to use a Density Reagent or Lymphocyte Separation Tube for Human Peripheral Blood, Cat#: 7912011/7922021). Determine the percentage of CD3⁺ T cells in the PBMC by flow cytometry or other suitable methods, and according to the number of T cells, CD3/CD28 magnetic beads were added for T cell isolation(it is recommended to use a Human T Cell Isolation & Activation Magnetic Beads Kit, Cat# : 6167014).









2. Resuspend and count the T cells in complete medium equilibrated to room temperature, seed T cells in T25 flask at a concentration of 0.5×10^6 cells/mL~ 1×10^6 cells/mL, and culture in a 37°C, 5% CO₂ incubator for activation of T cells.

3. Up to day 3, observe T cells morphology, supplement the same volume of fresh complete medium, if the medium is too yellow, the amount of medium can be increased appropriately.
4. Observed T cells morphology and counted every 2~3 days, supplement fresh complete medium based on the calculation result, adjust the cell concentration to 0.5×10^6 cells/mL ~ 1×10^6 cells/mL, and harvested T cells after 14 days of culture.
5. Change a bottle with a larger volume or transfer into a cell culture bag (it is recommended to use a cell culture bag, Cat#: 6071011/6071012) according to the volume of the cell culture suspension. The maximum culture volume of a T75 culture bottle is 40 mL, and the maximum culture volume of a T175 culture bottle is 200 mL. When the volume of the medium is more than 200 mL, transfer the cell culture suspension into a cell culture bag.

[Notes]

- Pay attention to operate in an aseptic condition.
- This product supports the culture of T cells and does not require additional human serum. Depending on the experimental needs, 2%~5% heat-inactivated human serum can be added to the medium to enhance the viability and expansion of T cells. The exact amount of human serum added depends on the T cell culture experience.
- Equilibrate the medium to room temperature before use.

[Description of Product Symbol]

Product Symbol	Description	Product Symbol	Description
	Catalogue number		Batch code
	Date of manufacture		Temperature limit
	Use-by date		Consult instructions for use
	Manufacturer		Keep away from sunlight

[Related Product]

Product Name	Cat No.	Specification
L500 Serum-Free Medium for Lymphocyte (GMP)	6811021	1000 mL/bottle
L100 Serum-Free Medium for Lymphocyte	6911011	1000 mL/bottle
Human T Cell Isolation & Activation Magnetic Beads Kit	6167014	1 kit
Lymphocyte Separation Tube for Human Peripheral Blood	7922112	15 mL/vial × 20 vials
Lymphocyte Separation Tube for Human Peripheral Blood	7922021	50 mL/vial × 25 vials
Density Reagent Separation Medium	7912011	250 mL/bottle
Human Lymphocyte Separation Medium	6111011	100 mL/bottle
Cell Culture Supplemental Mix	6122012	25 mL/bottle
	6122011	250 mL/bottle
Cell Culture Bags	6071011	640 cm ² , 10 bags/package

[Instruction Revision Date]

2024.09.27

[Company Information]

Manufacturer and after-sales service unit Name:

Shenzhen Dakewe Bio-engineering Co., Ltd.

Website: www.dakewe.com

Telephone: (86-755) 86235300

Email: RD@dakewe.com

Production Address: Room 702-703, Building No.1, Shenzhen Biomedicine Innovations Industrial Park, No.14 Jinhui Road, Kengzi Street, Pingshan District, Shenzhen

After-sales service telephone: (86-755) 86235300

Zip Code: 518122