

SUPERCULTURE Serum-Free Medium for Mouse Lymphocyte

Cat#: 6211011

[Product Name]

Serum-Free Medium for Mouse Lymphocyte

[Product Description]

Serum-Free Medium for Mouse Lymphocyte is suitable for the in vitro culture of mouse lymphocytes and DC cells. This product is a chemically defined medium, all of whose components are manufactured with cell culture-grade raw materials and free of serum, thereby effectively avoiding the change of serum quality and the influence of serum components and exogenous components on the experimental study and realizing the in vitro culture of mouse lymphocytes, DC cells and other immune cells.

[Model & Specification]

Product Name	Cat. No.	Specification
Serum-Free Medium for Mouse Lymphocyte	6211011	250 mL/bottle

[Storage Conditions and Validity Period]

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

[Directions for Use]**Example 1: Culture of mouse T Lymphocytes**

1. Pre-coating of culture vessel: Coat the culture vessel with 5 µg/mL mouse CD3 monoclonal antibodies and incubate at 37°C for at least 2 h. Remove the remaining coating medium prior to use.
2. Allow the Serum-Free Medium for Mouse Lymphocyte to equilibrate at room temperature.
3. Separate mouse peripheral blood lymphocytes or spleen lymphocytes aseptically (recommended use of Mouse Lymphocyte Separation Medium, Cat#: 7211011).
4. According to the count results, inoculate the separated lymphocytes into the cell culture vessel coated with mouse CD3 monoclonal antibody at a concentration of $2\sim 2.5 \times 10^6$ cells/mL with Serum-Free Medium for Mouse Lymphocyte, add 5 µg/mL of mouse CD28 monoclonal antibody and 300 IU/mL of rmIL-2 to stimulate the growth and proliferation of T lymphocytes, and culture the cells in a 37°C incubator containing 5% CO₂ and in saturated humidity.
5. Observe the activation state of cells, take samples every 2~3 days to count the cell
6. concentration and supplement fresh Serum-Free Medium for Mouse Lymphocyte (containing 300 IU/mL rmIL-2) according to the count results, and adjust the cell concentration to 1.5×10^6 cells/mL.
7. Harvest the cells for subsequent testing or experimental use.

Example 2: Culture of Mouse Bone Marrow DC Cells

1. Allow the Serum-Free Medium for Mouse Lymphocyte to equilibrate at room temperature.
2. Separate mouse bone marrow mononuclear cells aseptically. According to the count results, inoculate the separated monocytes into 6-well or 12-well plates at a concentration of $1\sim 5 \times 10^6$ cells/mL using the Serum-Free Medium for Mouse Lymphocyte, add rmGM-CSF and rmIL-4 at a final concentration of 200 IU/mL to each well, and culture in a 37°C incubator containing 5% CO₂ and in saturated humidity.
3. After 48 h, shake the culture plates gently, aspirate and discard all medium and suspended cells, and add fresh medium containing 200 IU/mL rmGM-CSF and rmIL-4 to continue the culture.
4. Replace half the medium every other day, i.e., collect the previous medium, and resuspend the









cell pellet with fresh medium containing 200 IU/mL rmGM-CSF and rmIL-4 after centrifugation, and return the cell suspension to the original dish.

5. On Day 6, add 1000 IU/mL cytokine TNF- α or other maturation-promoting cytokine after replacement of half medium and culture for 2 days to promote dendritic cell maturation (antigen can be added 1 day before TNF- α addition to obtain antigen-loaded DCs).
6. Collect suspended and slightly adherent cells, i.e., mature DCs.

[Notes]

- Avoid repeated freezing and thawing of this product, and pay attention to operate aseptically during use.
- When this product is used to culture T lymphocytes, addition of 2%~5% cell culture supplement can enhance the cell expansion efficiency.
- This product is for research use only.

[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
Mouse Lymphocyte Separation Medium	7211011	100 mL
Porcine Lymphocyte Separation Medium	7411011	100 mL
Nylon Mesh 9 × 9 cm	7061011	25 pieces
Mouse IFN- γ Pre-Coated ELISPOT Kit	2210002	96 T
Mouse IL-4 Pre-Coated ELISPOT Kit	2210402	96 T

[Instruction Revision Date]

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