

TLY CULTURE® Kit 25

Product features **TLY CULTURE® Kit 25** developed by GC LYMPHOTEC Inc. is a new type of kit for human lymphocyte culture which is a set of culture flasks and special culture medium (5 mL) required for culture of human lymphocyte. This kit easily enables culturing of human lymphocytes from small amount of whole blood and fresh lymphocytes after separation. Anti-human CD3 antibody is immobilized on the bottom surface of the culture flasks. The culture medium mainly consists of RPMI-1640 medium and contains 10% FBS and interleukin-2 (IL-2).

TLY CULTURE® Kit 25 is a product useful for research, tests, etc. that could not be performed before because of a small amount of blood samples.

Kit contents Culture flasks (25 cm²) with anti-human CD3 antibody immobilized on the bottom surface of the flasks containing 5 mL of culture medium for culture of human lymphocyte.

Intended use This product enables preparation of samples for DNA analysis that could not be performed because of a small amount of blood samples.

How to use **Culture preparation**

1. Thaw **TLY CULTURE® Kit 25** at room temperature or using incubator at 37°C.
2. Gently rotate the flask and remove waterdrops on the wall (*).
3. Leave it still until use.

* If you are concerned about water droplets on the inside of the cap, remove it aseptically by aspirating.

Culture of peripheral whole blood

1. Collect blood with a heparin-treated syringe.
2. Suspend 10 to 100 µL of whole blood into **TLY CULTURE® Kit 25**.
3. Culture the cells under the condition of 5% CO₂ at 37°C.

Separation and culture of peripheral blood mononuclear cells

1. Collect blood with a heparin-treated syringe.
2. Separate mononuclear cells by density gradient centrifugation.
3. Suspend the cells into **TLY CULTURE® Kit 25**.
4. Culture the cells under the condition of 5% CO₂ at 37°C.

Culture conditions

1. The total number of lymphocytes at the start of culture is about 10⁴ to 10⁶ cells (corresponding to 10 to 1000 µL of the blood).
2. When the total number of cells exceeds 2 × 10⁷ cells, it reaches the limit of growth. Transfer the cells to a new flask to expand and continue culturing.

Precautions

1. This product cannot be used for cells other than human.
2. For whole blood culture, do not put more than 100 µL of the culture medium.
3. There are individual differences in the lymphocyte proliferation, so it may take time to proliferate or the cells may not proliferate.
4. Do not use for purposes other than research.

Storage conditions Store the product in a frozen state (-20°C) until use.

Expiration date The product is stable for at least 1 year after manufacturing when stored in a frozen state (The expiration date is indicated on the label of the outer lid.)
Use the product immediately after thawing.

Packaging unit 2 pieces (TLY-FK25-2)
5 pieces (TLY-FK25-5)

References Sekine T, Shiraiwa H, Yamazaki T, et al.: Biomed. Pharmacoter. **47** 73-78 (1993)
Sekine T, Takayama T, Konomi Y, et al.: HUMAN CELL **7** 121-123 (1994)

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