

## Ficoll Paque 1077 (Histopaque)

**Cat.#** IS-1077-500

**Size** : 500 mL

**Theoretical pH:** 7.0 ± 0.5

**Osmolality:** 300 mOsm/kg ±20

**Density:** 1.077 ± 0.001

**Colour:** colourless, clear solution

**Storage conditions:** Room temperature, protected from light

**Shelf life:** 24 months

**Sterility tests:**

- bacteria in aerobic and anaerobic conditions
- fungi and yeast

**Endotoxin:** < 10 EU/ml

**Composition:** Displayed on website and also available on request

**Recommended use:**

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)

The product is intended to be used for in vitro diagnostic and scientific purposes. Do not use it in therapy, human or veterinary applications.

**Applications:**

Ficoll Paque 1077 is designed for the simple, rapid isolation of lymphocytes from whole blood , peripheral blood , to isolate Mono Nuclear Cells (MNC)

The product is suitable for whole blood , diluted that has been treated with anti-colagulants or defibrinating agents.

For best results, use blood drawn less than 2 hours before. Do not use blood more than 24 hours from when it was drawn.

*FICOLL PAQUE - 1077 is also called Histopaque 1077*

**For Research use only  
IMMUNOLOGICAL SCIENCES**

Web-site: [www.immunologicalsciences.com](http://www.immunologicalsciences.com) - E-Mail: [info@immunologicalsciences.com](mailto:info@immunologicalsciences.com)

**Uses:**

- 1) Thoroughly mix the Ficoll Paque 1077 by inverting the bottle gently.
- 2) Aseptically transfer 3 ml of Ficoll Paque 1077 to a 15 ml centrifuge tube.
- 3) Mix 2 ml of defibrinated or heparined blood with 2 ml of physiological saline (PBS w/o Ca w/o Mg) or balanced salt solution .
- 4) Carefully layer the diluted blood over 3 ml of Ficoll Paque (room temperature) in a 15 ml centrifuge, creating a sharp blood-Ficoll Paque 1077 interphase. DO NOT MIX! The quality of the separation is dependent upon a sharp interphase between the lymphocytes and the solution.
- 5) Centrifuge the tube at 400G at room temperature for 15 to 30 minutes. Centrifugation should sediment erythrocytes and polynuclear leukocytes and band mononuclear lymphocytes above the Ficoll Paque 1077.
- 6) Aspirate the top layer of clear plasma to within 2-3 mm above the lymphocyte layer.
- 7) Aspirate the lymphocyte layer plus about half of the Ficoll Paque 1077 layer below it and transfer it to a centrifuge tube. Add an equal volume of buffered balanced salt solution to the lymphocyte layer in the centrifuge tube and centrifuge for 10 minutes at room temperature (18°C to 25°C) at a speed sufficient to sediment the cells without damage i.e., 160-260 g. Washing the cells removes Ficoll Paque 1077 and reduces the percentage of platelets.
- 8) Wash the cells again with buffered balanced salt solution (ISL0615) and resuspend in the appropriate medium for your applications.

**Important Remarks:**

- CAUTION : the product is not for human or animal therapeutic use. Uses other than the intended use may be a violation of local law.
- Each laboratory must carry out their own testing procedures on new media according to national legislation prior to releasing them to the lab for routine in vitro applications.
- Each clinician/scientist must make an independent judgment on whether this medium is suitable for use in in vitro diagnostic applications conducted in their laboratory.