

Rat Primary Hepatocytes

Catalog No. **RA-6224F**

Suggested Medium: Hepatocyte Medium /w Kit (500 ml)

Catalog No. **M1265**

Product Description

Rat Primary Hepatocytes are derived from the liver of laboratory Sprague–Dawley rat. Cells are freshly isolated and frozen at passage 0. Each vial contains 3×10^6 cells. Cells are negative for bacteria, yeast, fungi, and mycoplasma. Rat Primary Hepatocytes are tested for expression of markers using antibodies, ZO-1 by Immunofluorescence Staining. Cells can be expanded on multiwell culture plates ready for experiments under the cell culture conditions specified by *Cell Biologics*.

Laboratory Applications

Rat Primary Hepatocytes can be used in standard biochemical procedures include PCR, Western blotting, immunoprecipitation, metabolism, drug-drug interaction, drug transporter activity toxicity of drug candidates or cell derivatives for desired research applications.

Authorized Uses of *Cell Biologics*' Products

Rat Primary Hepatocytes from *Cell Biologics* are distributed for internal research purposes only. Our products are not authorized for human use, for in vitro diagnostic procedures or for therapeutic procedures. Transfer or resale of any *Cell Biologics*' cells or products from the purchaser to other markets, organizations or individuals is prohibited by *Cell Biologics*, without the company's written consent. *Cell Biologics*' Terms and Conditions must be accepted before submitting an order.

Disclaimer

Investigators should handle the cells that they receive from *Cell Biologics* with caution and treat all animal cells as potential pathogens, since no test procedure can completely guarantee the absence of infectious agents.

Warranty and Liability

Cell Biologics' guarantee applies only to your purchase of *Cell Biologics*' cells with *Cell Biologics*' Media and Coating Solution for appropriate cell culture and cell testing following *Cell Biologics*' online protocols within 35 days from the date of product delivery.

Primary Cell Culture Protocol

All cell culture procedures must be conducted in a bio-safety cabinet. Any and all media, supplements, and reagents must be sterilized by filtration through a 0.2 µm filter. Use aseptic technique to prevent microbial contamination.

Medium:

Review the information provided on the *Cell Biologics* website about appropriate culture media (e.g. serum and other supplements). Use pre-warmed (37°C) cell culture media (30-50 ML, Catalog No. M1265) to seed cells and when changing media.

Coating of Cell Culture Plates or Dishes:

Coat sterile culture dishes or flasks with Collagen Type I, Rat Tail Coating Solution (Catalog No. 6953, *Cell Biologics*) for 2 hours, then aspirate the excess solution and wash with PBS 1-2 times before seeding cells.

Handling of Arriving Live Cells

When you receive the live cells in the cell culture medium

- Centrifuge cells at 100g for 4 minutes.
- Aspirate the supernatant and resuspend the cell pellet in Cell Culture Medium (Catalog No. M1265, *Cell Biologics*).
- Seed cells gently in plates or dishes coated with Collagen Type I, Rat Tail Coating Solution (Catalog No. 6953, *Cell Biologics*). Cell seeding density is as below recommended.
- Place dishes or plates in a humidified, 5%-CO₂ incubator at 37°C for 6-12 hours.
- Wash cells once with PBS and add the fresh culture medium until experiments.
- Cells should be checked under a microscope to verify appropriate cell morphology.

Recommended Cell Seeding:

- 1.2-1.5 million cells are seeded per well of a 6-well plate;
- 0.4-0.6 million cells are seeded per well of a 12-well plate;
- 0.15-0.25 million cells are seeded per well of a 24-well plate;
- 0.08-0.12 million cells are seeded per well of a 48-well plate;
- 0.02-0.05 million cells are seeded per well of a 96-well plate;

Note: The number of seeding cells in each well may be doubled by using frozen vials.

Handling Freshly Plated Hepatocytes

1. Place plate in biosafety cabinet after receiving cells.
2. Aspirate all shipping medium from each well.
3. Replace with the appropriate volume of hepatocyte medium (Catalog No. M1269, *Cell Biologics*).
4. Place the plates in a 5% CO₂ incubator at 37°C.
5. Allow the hepatocytes to culture overnight (12-18 hours) before using them.
6. Replace the maintenance medium daily.

Note:

- Please send us the cell images (>90% confluence) if you have any question or problem with cultured cells.