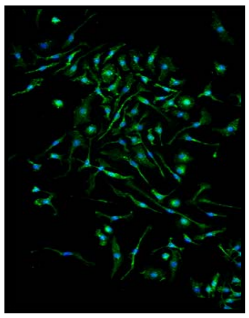
REF: P10626

HEPATIC CELL SYSTEM INNOPROFILE™

MOUSE LIVER KUPFFER CELLS



Product Type:	Cryo-preserved Kupffer Cells
Catalog Number:	P10626
Source:	Mouse Liver
Number of Cells:	1 x 10^6 Cells / vial (1ml)
Storage:	Liquid Nitrogen

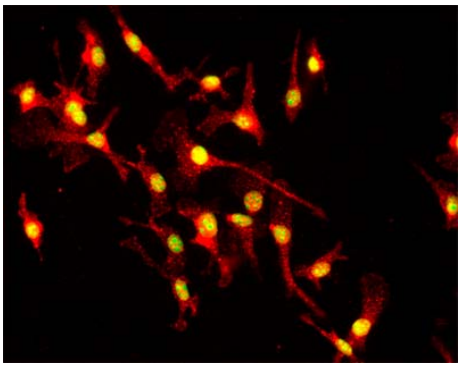
Mouse Liver Kupffer Cells from Innoprot have been isolated from postnatal day 2 mouse liver. Mouse Kupffer Cells are cryopreserved immediately after purification and delivered frozen. MKC are guaranteed to further culture in the conditions provided in this technical sheet; however, MKC are not recommended for expanding or long-term cultures since the cells do not proliferate in regular culture.

Mouse Liver Macrophages, which are also known as Kupffer cells, reside within the lumen of liver sinusoids. MKC protect the liver by responding to pathogens and metastatic cells, while tolerating harmless self and foreign antigens, which enter via blood flow through the portal vein and hepatic artery. Recent studies have shown that kupffer cells play an important role in fibrosis, liver inflammation, fatty liver disease, and liver transplantation. MKC are an excellent model for studying macrophage functions under normal physiological and pathological conditions.

Recommended Medium

- Macrophage Medium

(Reference: P60136)



Product Characterization

Immunofluorescent method

- F4/80
- CD 11b

The cells test negative for HIV-1, HBV, HCV, mycoplasma, bacteria, yeast and fungi

Product Use

THESE PRODUCTS ARE FOR RESEARCH USE ONLY. Not approved for human or veterinary use, for application to humans or animals, or for use in vitro diagnostic or clinical procedures

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INSTRUCTIONS FOR CULTURING CELLS

IMPORTANT: Cryopreserved cells are very delicate. Thaw the vial in a 37 °C waterbath and return them to culture as quickly as possible with minimal handling!
Experiments should be well organized before thawing Kupffer cells. It is recommended that Kupffer cells are used for experiments as quickly as possible after thawing the cells since they ***cannot be subcultured or passaged***, as ***the cells do not proliferate***.

Set up culture after receiving the order:

1. Macrophages are not expected to further expand in culture. It is recommended to use either cell culture-grade or bacterial-grade plastics for the culturing of macrophages since they easily attach to culture plastics

2. Prepare complete medium (MaM, Cat. #P60136). Thaw MaGS, FBS and P/S solution at 37°C. Gently tilt the tubes several times to ensure the contents are completely mixed before adding to the medium. Decontaminate the external surfaces of medium bottle and medium supplement tubes with 70% ethanol and transfer them to a sterile field. In a sterile field, remove the caps without touching the interior threads with fingers. Add MaGS, FBS and P/S solution to the medium and mix well.

3. Add complete medium to the culture vessel. Leave the vessel in the sterile field and proceed to thaw the cryopreserved cells.

4. Place the frozen vial in a 37°C water bath. Hold and rotate the vial gently until the contents completely thaw. Promptly remove the vial from the water bath, wipe it down with 70% ethanol, and transfer it to the sterile field. Carefully remove the cap without touching the interior threads

5. Gently resuspend the contents of the vial into the equilibrated. A seeding density of 10,000-20,000 cells/cm^2 is recommended.

   Note: Dilution and centrifugation of cells after thawing are not recommended since these actions are more harmful to the cells than the effect of residual DMSO in the culture.

6. Replace the cap or lid of the culture vessel and gently rock the vessel to distribute the cells evenly. Loosen cap, if necessary, to allow gas exchange.

7. Return the culture vessel to the incubator.

8. For best results, do not disturb the culture for at least 16 hours after the culture has been initiated. Change the growth medium the next day to remove residual DMSO and unattached cells. Once Kupffer cells attach, the culture is ready for experiment.

9. If necessary, refresh media every other day thereafter; however, we do not recommend culturing macrophages for an extended period.

Caution: *Handling human derived products is potentially bioharzadous. Although each cell strain testes negative for HIV, HBV and HCV DNA, diagnostic tests are not necessarily 100% accurate, therefore, proper precautions mush be taken to avoid inadvertent exposure. Always wear gloves and safety glasses when working these materials. Never mouth pipette. We recommend following the universal procedures for handling products of human origin as the minimum precaution against contamination [1].*

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