Canine Liver Kuffer Cells

Catalog No. **D-6226**

Suggested Medium: Macrophage Medium /w Kit (500 ml)
Catalog No. **M3368**

Product Description

Canine Liver Kuffer Cells are derived from the liver tissue of beagle dog. Cells are grown in tissue culture flasks and incubated in *Cell Biologics'* Cell Culture Medium for 2-5 days. Prior to shipping, cells at passage 0 are detached from flasks and cryopreserved in vials. Each vial contains 3 x10^6 cells and is delivered frozen. Cells are negative for bacteria, yeast, fungi, and mycoplasma. Cells are tested for expression of markers using antibodies, CD11b by flow cytometry. Cells can be expanded on a multiwell culture plate ready for experiments under the cell culture conditions specified by *Cell Biologics.* Repeated freezing and thawing of cells is not recommended.

Laboratory Applications

Canine Liver Kuffer Cells can be used in standard biochemical procedures include PCR, Western blotting, immunoprecipitation, ROS, or cell derivatives for desired research applications.

Storage of *Cell Biologics* Products

Cell Biologics will ship frozen cells on dry ice. On receipt, immediately transfer frozen cells to liquid nitrogen until ready for experimental use. Live-cell shipment is also available on request. Primary cells can never be kept at -20 °C.

Authorized Uses of *Cell Biologics* Products

Canine Liver Kuffer Cells 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*. *Cell Biologics'* Terms and Conditions must be accepted before submitting an order.

Disclaimer

Appropriate safety procedures should always be used with this material. Investigators should handle the Cells that they receive from *Cell Biologics* with caution and treat all Cells as potential pathogens, since no test procedure can completely guarantee the absence of infectious agents. The entire text of discussing Biosafety in Microbiological and Biomedical Laboratories, 5th ed. is available online at http://www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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.
Cryo-preserved cells must be stored in liquid nitrogen or seeded immediately upon arrival.

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) to recover cryo-preserved cells and when changing media or splitting cells.

Coating of flasks or dishes:
Coat sterile culture dishes or flasks with Gelatin-Based Coating Solution (*Cell Biologics*, Catalog No. 6950) for 2 min and then aspirate the excess solution before seeding cells.

Handling of Arriving Live Cells
When you receive the live cells in a T25 or T75 flask, remove the sticker from the filter cap, and keep the flask with 6-20 ml existing medium in 37°C CO_2 incubator for 1 hour before replacing the desired *Cell Biologics'* cell culture medium. Either split the 95-100% confluent cells from a T25 flask to a T75 flask after 1 hour or let the cells grow in the T25 flask with the desired Medium (such as M3368) for 12 hours before subculturing cells. The recommended split ratio for primary cells is 1:2.

Cell recovery from cryovial:
- Quickly thaw cells in cryo-vial by incubating them in a 37°C water bath for <1 min until there is just a small bit of ice left in the vial.
- Promptly remove the vial and wipe it down with 70% ethanol.
- Transfer cells from the vial to a sterile centrifuge tube. Add 8-10 ml of pre-warmed *Cell Biologics* Cell Culture Medium.
- Flush the vial with an additional 0.5-1 ml of medium to ensure complete transfer of cells to the centrifuge tube.
- Centrifuge cells at 200 g for 5 minutes.
- Aspirate the supernatant and resuspend the cell pellet in 6 ml of *Cell Biologics'* Cell Culture Growth medium.
- Add resuspended cells into a plate (tissue culture treated)

Recommended Cell Seeding:
- 0.6-0.8 million cells are seeded per well of a 12-well plate or 1.0-1.5 million macrophages are seeded per well of a 6-well plate.
- Place a plate in a humidified, 5%-CO_2 incubator at 37°C until experiments.
- Change fresh cell culture medium every 24-48 hours.
- Cells should be checked daily under a microscopy to verify appropriate cell morphology.

Note:
- Please send us the cell images (>90% confluence) if you have any question or problem with cultured cells.
- Per request, a Certificate of Analysis will be provided for each cell lot purchased.