

Rat Liver Cells

Cell specification

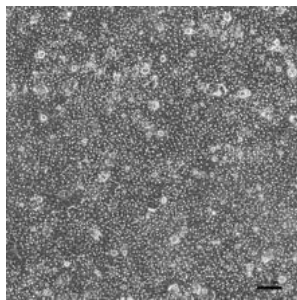
The liver fulfills many vital processes in the body. As the central organ for energy metabolism (glycolysis, gluconeogenesis, lipid and amino acid metabolism) the liver is responsible for the maintenance of the blood sugar level and the synthesis of plasma proteins, ammonia detoxification (ureagenesis) and drug metabolism under physiological and patho-physiological conditions.

Parenchymal hepatocytes are the most prominent cells within the liver. Hepatocytes eliminate toxic substances from the blood. In this biotransformation process transporter proteins (influx and efflux transporter), phase I reactions (cytochrome P450 proteins), and phase II reactions (mainly glucuronidation and sulfation) play a central role. Primary hepatocytes are perfect models for *in vitro* metabolism and toxicity studies prior to clinical *in vivo* assessments as well as for bioaccumulation and clearance studies.

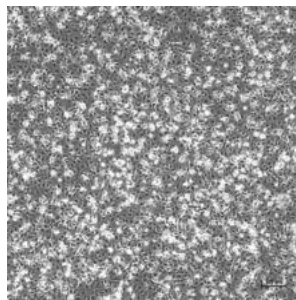
Non-parenchymal liver cells (NPCs) include Kupffer cells, endothelial cells and fat storing cells (Ito cells, hepatic stellate cells) amongst other cell types. NPCs play a pivotal role during inflammatory response and fibrosis, interacting with hepatocytes and thereby complementing the liver specific functions.

Primacyt provides primary rat hepatocytes and non-parenchymal liver cells for 2D and 3D cell cultures to mimic hepatocellular functions.

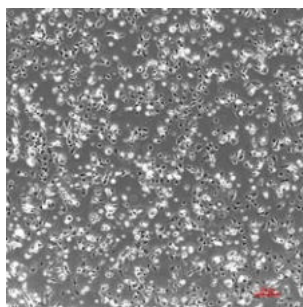
Cell morphology



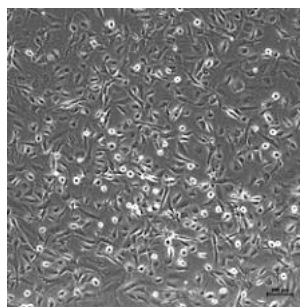
Hepatocytes



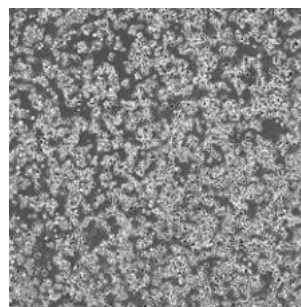
NPC



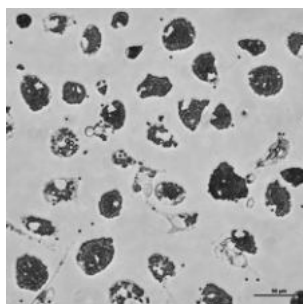
Kupffer cells



Endothelial cells



Stellate cells



Kupffer cells Phagocytic activity

Related Products

Fresh rat liver cells:

RHS-01	Fresh Rat Hepatocytes in Suspension
RHP-06	Fresh Rat Hepatocytes on collagen coated 6well plates
RHP-12	Fresh Rat Hepatocytes on collagen coated 12well plates
RHP-24	Fresh Rat Hepatocytes on collagen coated 24well plates
RHP-96	Fresh Rat Hepatocytes on collagen coated 96well plates

Cryopreserved rat liver cells:

RHCS	Rat Hepatocytes Cryopreserved for use in suspension
RHCP	Rat Hepatocytes Cryopreserved Plateable
RHCP-I	Rat Hepatocytes Cryopreserved Plateable, Cytochrome P450 inducible

RLKC	Rat Liver Kupffer Cells
RLSEC	Rat Liver Sinusoidal Endothelial Cells
RLSC	Rat Liver Stellate Cells

Consumables for rat liver cells:

HM-500	Hepatocyte Plating Medium
HGM-500	Hepatocyte Growth Medium
HHMM-500	Human Hepatocyte Maintenance Medium
3D-HMM-500	Hepatocyte Maintenance Medium for 3D cultures
NPCM-500	Non-Parenchymal Cell Medium
TK-1	Thawing kit
PTK-1	Plating and Thawing kit
CCPxx	Collagen coated plates (6-, 12-, 24-, and 96well format)
RCT-100	Rat tail collagen Type I