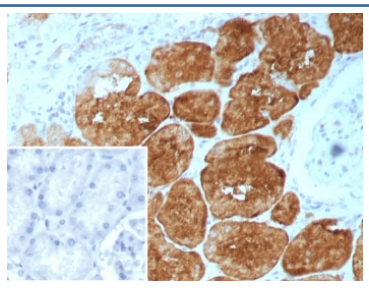
Fatty Acid Binding Protein 1 Antibody Rabbit MAb / FABP1 [clone FABP1/9085R] (V5440)

Catalog No.	Formulation	Size
V5440-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5440-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5440SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

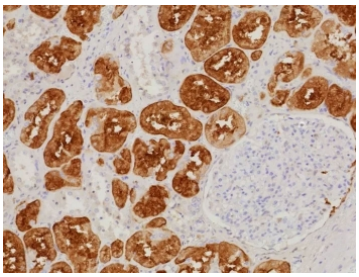
Recombinant RABBIT MONOCLONAL

Bulk quote request

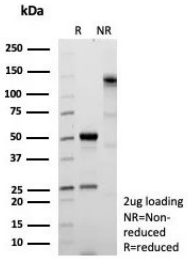
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	FABP1/9085R
Purity	Protein A/G affinity
UniProt	P07148
Localization	Cytoplasm, Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This Fatty Acid Binding Protein 1 antibody is available for research use only.



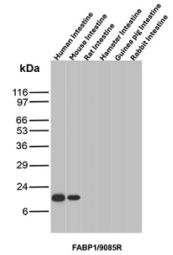
Immunohistochemistry of Fatty Acid Binding Protein 1 antibody in human kidney. FFPE human kidney tissue was stained with Fatty Acid Binding Protein 1 antibody rabbit mAb clone FABP1/9085R. Strong cytoplasmic HRP-DAB brown staining is observed in renal tubular epithelial cells, consistent with known FABP1 expression in proximal tubules, while glomerular structures show minimal to absent staining. The inset image shows the PBS negative control with no primary antibody, demonstrating absence of specific staining. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 Tris-EDTA buffer for 20 minutes followed by cooling prior to antibody incubation.



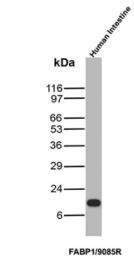
IHC staining of FFPE human kidney tissue with Fatty Acid Binding Protein 1 antibody (clone FABP1/9085R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Fatty Acid Binding Protein 1 antibody (clone FABP1/9085R) as confirmation of integrity and purity.



FABP1 Antibody Multi-Species Tissue WB. Western blot analysis of human, mouse, rat, hamster, guinea pig, and rabbit intestine tissue lysates using Fatty acid-binding protein 1 antibody clone FABP1/9085R. A band is detected at approximately 14 kDa in selected species, consistent with the predicted molecular weight of FABP1, an intestinal and hepatic lipid-binding protein involved in fatty acid transport and metabolism.



Fatty Acid Binding Protein 1 Antibody Rabbit MAb Human Intestine WB. Western blot analysis of human intestine tissue lysate using FABP1 antibody clone FABP1/9085R. A clear band is detected at approximately 14 kDa, consistent with the predicted molecular weight of Fatty acid-binding protein 1 / FABP1, an abundant cytoplasmic fatty acid transport protein expressed in intestinal epithelial cells.

Description

Fatty Acid Binding Protein 1 Antibody Rabbit MAb clone FABP1/9085R recognizes Liver fatty acid binding protein, also known as FABP1 or L-FABP, a cytoplasmic lipid binding protein encoded by the FABP1 gene on chromosome 2p11.2. Liver fatty acid binding protein is abundantly expressed in hepatocytes and plays a central role in intracellular transport and metabolism of long chain fatty acids. FABP1 is a member of the fatty acid binding protein family, a group of small cytoplasmic proteins that regulate lipid trafficking and lipid mediated signaling pathways.

FABP1 contains a conserved beta barrel structure that forms a hydrophobic ligand binding pocket, enabling binding of long chain fatty acids, bile acids, eicosanoids, and other hydrophobic molecules. In hepatocytes, FABP1 facilitates fatty acid uptake, beta oxidation, triglyceride synthesis, and lipid storage. By buffering intracellular fatty acids, Liver fatty acid binding protein contributes to protection against lipotoxic stress and supports maintenance of hepatic metabolic homeostasis.

In normal tissues, FABP1 expression is strongest in liver, where it localizes to the cytoplasm of hepatocytes. Lower levels of expression are observed in kidney proximal tubule epithelium and small intestinal enterocytes. Because of its abundant and relatively tissue restricted expression, FABP1 antibody is frequently used in research applications to study hepatocellular differentiation, metabolic regulation, and liver disease models. Cytoplasmic staining in hepatocytes is the

expected localization pattern.

Altered FABP1 expression has been associated with fatty liver disease, metabolic syndrome, and hepatocellular carcinoma. Changes in Liver fatty acid binding protein levels have been investigated in the context of lipid accumulation, oxidative stress, and liver injury. Fatty Acid Binding Protein 1 Antibody Rabbit MAb clone FABP1/9085R is suitable for detecting FABP1 expression in relevant research applications focused on hepatic biology and lipid metabolism.

Researchers interested in a broadly validated FABP1 antibody for lipid metabolism and fatty acid transport studies may also benefit from our HuProt-validated FABP1 antibody clone FABP1/3487, supported by western blot, immunohistochemistry, and protein microarray specificity data.

Application Notes

Optimal dilution of the Fatty Acid Binding Protein 1 antibody should be determined by the researcher.

Immunogen

A human recombinant FABP1 protein fragment (within amino acids 1-127) was used as the immunogen for the recombinant Fatty Acid Binding Protein 1 antibody rabbit mAb clone FABP1/9085R.

Storage

Aliquot the Fatty Acid Binding Protein 1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Fatty acid-binding protein 1 antibody, Liver-type fatty acid-binding protein, FABP1 antibody, L-FABP antibody