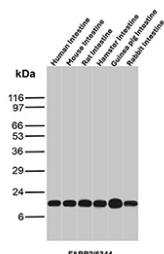


FABP2 Antibody / Intestinal Lipid Transport Marker [clone FABP2/6344] (V5886)

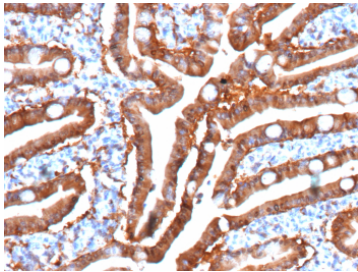
Catalog No.	Formulation	Size
V5886-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5886-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5886SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

[Bulk quote request](#)

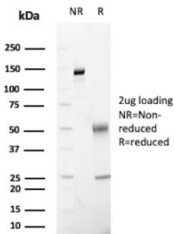
Species Reactivity	Guinea Pig, Hamster, Human, Mouse, Rabbit, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	FABP2/6344
UniProt	P12104
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This FABP2 Antibody / Intestinal Lipid Transport Marker is available for research use only.



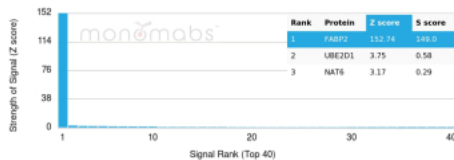
FABP2 Antibody Multi-Species Intestine WB. Western blot analysis of human, mouse, rat, hamster, guinea pig, and rabbit intestine tissue lysates using FABP2 antibody clone FABP2/6344. A distinct band is detected at approximately 15 kDa across all intestinal samples, consistent with the predicted molecular weight of Intestinal fatty acid-binding protein / FABP2. The conserved signal pattern across species aligns with the known enrichment of this intracellular fatty acid transport protein in absorptive intestinal epithelium.



FABP2 Antibody Small Intestine IHC. Immunohistochemistry analysis of FFPE human small intestine tissue stained with FABP2 antibody clone FABP2/6344. Strong HRP-DAB brown cytoplasmic staining is observed in absorptive intestinal epithelial cells lining the villi, consistent with the known enterocyte-associated expression pattern of Intestinal fatty acid-binding protein / FABP2, a protein involved in dietary lipid absorption and intracellular fatty acid transport. Minimal background staining is present in surrounding stromal and lamina propria cells. HIER was performed using 10mM Tris with 1mM EDTA, pH 9.0.

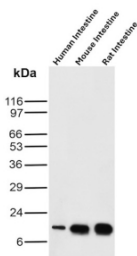


SDS-PAGE Analysis of purified FABP2/Fatty acid binding protein 2 antibody (FABP2/6344). Confirmation of Purity and Integrity of Antibody.



FABP2 Antibody Protein Microarray Validation. Specificity analysis of FABP2 antibody clone FABP2/6344 was performed using a HuProt(TM) protein microarray containing more than 19,000 full-length human proteins. Clone FABP2/6344 demonstrates strongest reactivity with FABP2, producing a Z-score of 152.74 and an S-score of 149.0, with clear separation from lower-ranking proteins including UBE2D1 and NAT6. These findings support the high specificity of this intestinal fatty acid-binding protein antibody for FABP2.

The Z-score represents the signal intensity generated when the monoclonal antibody, together with a fluorescently labeled anti-IgG secondary antibody, binds to a specific protein on the array. Z-scores are expressed as standard deviations above the mean signal intensity of all proteins represented on the HuProt(TM) array. Proteins are ranked according to descending Z-score values. The S-score reflects the difference between sequential Z-scores and serves as a measure of relative target specificity compared to potential off-target interactions.



FABP2 Antibody Human, Mouse and Rat Intestine WB. Western blot analysis of human intestine, mouse intestine, and rat intestine tissue lysates using FABP2 antibody clone FABP2/6344. A distinct band is detected at approximately 15 kDa in each sample, consistent with the predicted molecular weight of Intestinal fatty acid-binding protein / FABP2 and its conserved expression in absorptive intestinal epithelial cells across species.



FABP2 Antibody Small Intestine WB. Western blot analysis of human small intestine tissue lysate using FABP2 antibody clone FABP2/6344. A strong band is detected at approximately 15 kDa, consistent with the predicted molecular weight of Intestinal fatty acid-binding protein / FABP2, an enterocyte-associated fatty acid transport protein involved in dietary lipid absorption.

Description

Intestinal fatty acid-binding protein (FABP2) is a small cytoplasmic lipid-binding protein encoded by the FABP2 gene and predominantly expressed in absorptive epithelial cells of the small intestine. FABP2 Antibody / Intestinal Lipid Transport

Marker is useful for studying enterocyte biology, dietary lipid absorption, epithelial differentiation, and intestinal metabolic regulation. FABP2 belongs to the fatty acid-binding protein family, a group of structurally related intracellular proteins that bind long-chain fatty acids and facilitate their intracellular trafficking and metabolic utilization.

FABP2 antibody, also referred to as Intestinal fatty acid-binding protein antibody or I-FABP antibody in the literature, recognizes a protein that plays a major role in intestinal lipid handling and nutrient absorption. FABP2 is localized primarily within the cytoplasm of mature enterocytes lining the small intestinal villi, where it participates in fatty acid uptake, intracellular transport, and delivery of lipids to pathways involved in triglyceride synthesis and energy metabolism. Due to its highly restricted intestinal expression pattern, FABP2 is widely used as a marker of differentiated intestinal epithelium and enterocyte maturation.

FABP2 contributes to intestinal metabolic homeostasis by binding dietary fatty acids and promoting their efficient intracellular movement following luminal absorption. The protein participates in pathways associated with lipid digestion, chylomicron assembly, cellular energy regulation, and epithelial barrier maintenance. FABP2 has also been investigated in obesity, insulin resistance, inflammatory bowel disease, intestinal injury, and metabolic syndrome, reflecting the importance of intestinal lipid metabolism in systemic metabolic health.

In histologic applications, FABP2 expression is commonly observed as strong cytoplasmic staining in absorptive epithelial cells of the small intestine, particularly within villous enterocytes. This characteristic localization pattern makes FABP2 a useful marker for intestinal epithelial differentiation and gastrointestinal tissue characterization. Changes in FABP2 expression have additionally been reported in gastrointestinal malignancies and inflammatory disorders affecting intestinal epithelial integrity and absorptive function.

FABP2 is encoded on human chromosome 4q28-q31 and produces a highly conserved beta-barrel fatty acid-binding protein typical of the FABP family. The compact ligand-binding structure enables rapid intracellular fatty acid exchange and transport within enterocytes exposed to fluctuating dietary lipid levels. FABP2 functions closely with other intestinal transport and metabolic proteins involved in nutrient sensing, fatty acid uptake, and epithelial metabolic adaptation.

Clone FABP2/6344 has been evaluated using western blotting, immunohistochemistry, and HuProt microarray specificity validation methods to support selective detection of FABP2 in research applications. Western blot analysis commonly demonstrates FABP2 near its predicted molecular weight in intestinal tissue lysates, while immunohistochemistry reveals strong enterocyte-associated cytoplasmic staining patterns consistent with the known biology of this intestinal lipid transport protein. Protein microarray validation further supports specificity for FABP2 among thousands of human proteins represented on the array.

Explore our broader [Metabolism Antibodies page](#) for additional antibodies targeting lipid transport, nutrient absorption, energy regulation, and metabolic signaling pathways across hepatic, intestinal, adipocyte, and endocrine tissues.

Application Notes

Optimal dilution of the FABP2 Antibody / Intestinal Lipid Transport Marker should be determined by the researcher.

Immunogen

A recombinant fragment (around amino acids 1-132) of human FABP2 protein (exact sequence is proprietary) was used as the immunogen for the FABP2/Fatty acid binding protein 2 antibody.

Storage

FABP2/Fatty acid binding protein 2 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

Intestinal fatty acid-binding protein antibody, I-FABP antibody, FABP2 intestinal marker antibody, FABP2 enterocyte

marker antibody, Intestinal lipid transport protein antibody