

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat FABP1/L-FABP in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	E. coli-derived recombinant mouse FABP1/L-FABP Met1-Ile127 Accession # P12710
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

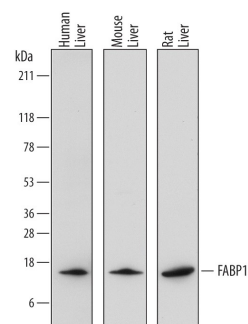
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	1 µg/mL	See Below

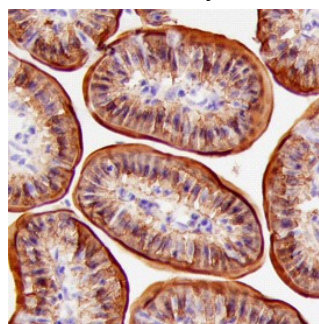
DATA

Western Blot



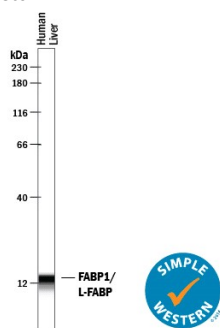
Detection of Human, Mouse, and Rat FABP1/L-FABP by Western Blot. Western blot shows lysates of human liver tissue, mouse liver tissue, and rat liver tissue. PVDF membrane was probed with 0.1 µg/mL of Sheep Anti-Human/Mouse/Rat FABP1/L-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7009) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for FABP1/L-FABP at approximately 14 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



FABP1/L-FABP in Mouse Intestine. FABP1/L-FABP was detected in perfusion fixed frozen sections of mouse intestine using Sheep Anti-Human/Mouse/Rat FABP1/L-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7009) at 1.7 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to apical portion of epithelial cells. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

Simple Western



Detection of Human FABP1/L-FABP by Simple Western™. Simple Western lane view shows lysates of human liver tissue, loaded at 0.2 mg/mL. A specific band was detected for FABP1/L-FABP at approximately 13 kDa (as indicated) using 1 µg/mL of Sheep Anti-Human/Mouse/Rat FABP1/L-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7009) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

FABP1 (fatty acid binding protein-1; also Liver-type fatty acid binding protein/L-FABP and 14 kDa Selenium-binding protein) is a 14-15 kDa intracellular member of the fatty acid binding protein family, calycin superfamily of molecules. It is expressed by intestinal epithelium and hepatocytes, and is known to bind both cholesterol and long-chain fatty acids in the cytosol. As fatty acids diffuse across the plasma membrane, they are sequestered by FABP1, facilitating fatty acid diffusion into the cell. FABP1 also binds bile acids and cholesterol, and transports cholesterol from one membrane compartment to another. Mouse FABP1 is 127 amino acids (aa) in length. It is a two β -sheet molecule that contains an acetylated initiating methionine. Full-length mouse FABP1 shares 94% and 84% aa identity with rat and human FABP1, respectively.