

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse FABP4 in direct ELISAs and Western blots. In Western blots, less than 5% cross-reactivity with recombinant mouse FABP5, recombinant rat (rr) FABP2, and rrFABP1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse FABP4 Met1-Ala132 Accession # P04117
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 as a 0.2 µm filtered solution in PBS.

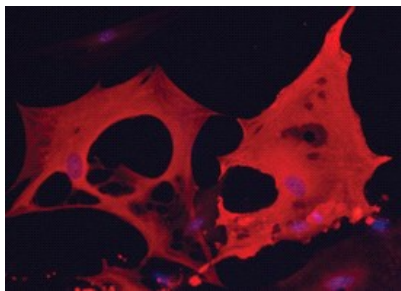
APPLICATIONS

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	Recombinant Mouse FABP4
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

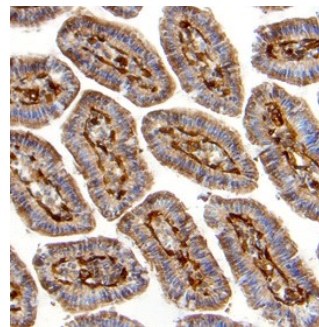
DATA

Immunocytochemistry



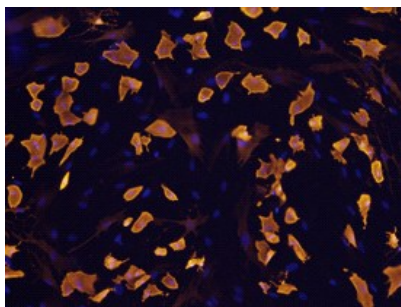
FABP4 in Mouse Adipocytes. FABP4 was detected in immersion fixed mouse mesenchymal stem cell-derived adipocytes using 10 µg/mL Goat Anti-Mouse/Rat FABP4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1443) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



FABP4 in Mouse Intestine. FABP4 was detected in perfusion fixed frozen sections of mouse intestine using Goat Anti-Mouse/Rat FABP4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1443) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to the plasma membrane of epithelial cells in intestinal glands. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

Immunocytochemistry



FABP4 in Rat Mesenchymal Stem Cells. FABP4 was detected in immersion fixed rat mesenchymal stem cells differentiated to adipocytes using Goat Anti-Mouse/Rat FABP4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1443) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

FABP-4 (fatty acid binding protein-4; also Adipocyte-type FABP, ALBP and aP2) is a 14-15 kDa member of the fatty acid binding protein family, calycin superfamily of molecules. It is expressed by adipocytes, macrophages, monocyte-derived DC and myoepithelial cells, and is known to serve as a carrier for select PPAR γ fatty acid ligands as they enter the nucleus. These ligands, or fatty acids, facilitate PPAR γ -mediated gene transcription. Mouse FABP-4 is 132 amino acids (aa) in length. It is a two β -sheet molecule that contains an NLS (aa 22-32) and a fatty acid binding segment (aa 127-129). Mouse FABP-4 is 94% and 92% aa identical to rat and human FABP-4, respectively.