

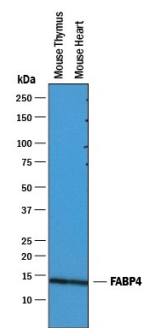
| DESCRIPTION | |
|---------------------------|---|
| Species Reactivity | Mouse/Rat |
| Specificity | Detects mouse FABP4 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse (rm) FABP5 and rmFABP9 is observed. |
| Source | Polyclonal Goat IgG |
| 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 | 0.25 µg/mL | See Below |
| Immunocytochemistry | 5-15 µg/mL | See Below |
| Immunohistochemistry | 5-15 µg/mL | See Below |
| Simple Western | 2.5 µg/mL | See Below |

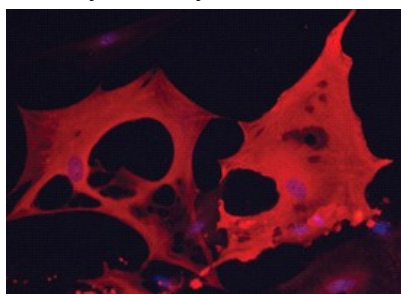
DATA

Western Blot



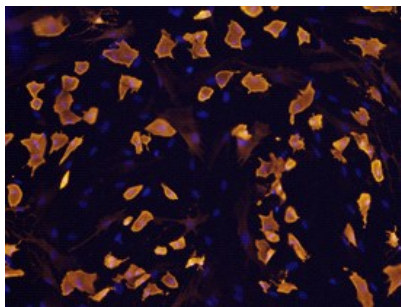
Detection of Mouse FABP4/A-FABP by Western Blot. Western blot shows lysates of mouse thymus tissue and mouse heart tissue. PVDF membrane was probed with 0.25 µg/mL of Goat Anti-Mouse/Rat FABP4/A-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1443) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for FABP4/A-FABP at approximately 14 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



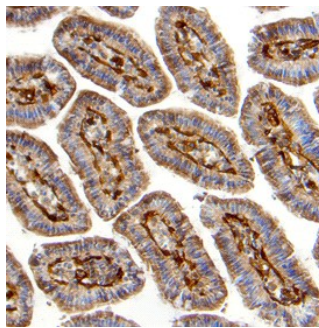
FABP4 in Mouse Adipocytes. FABP4 was detected in immersion fixed mouse mesenchymal stem cell-derived adipocytes using 10 µg/mL Goat Anti-Mouse/Rat FABP4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1443) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated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

Immunocytochemistry



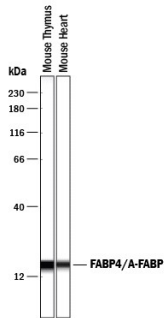
FABP4 in Rat Mesenchymal Stem Cells. FABP4 was detected in immersion fixed rat mesenchymal stem cells differentiated to adipocytes using Goat Anti-Mouse/Rat FABP4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1443) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the 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](#).

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](#).

Simple Western



Detection of Mouse FABP4/A-FABP by Simple Western™. Simple Western lane view shows lysates of mouse thymus tissue and mouse heart tissue, loaded at 0.2 mg/mL. A specific band was detected for FABP4/A-FABP at approximately 17 kDa (as indicated) using 2.5 µg/mL of Goat Anti-Mouse/Rat FABP4/A-FABP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1443) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

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 | <p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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.