

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	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.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse FABP4 Met1-Ala132 Accession # P04117
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

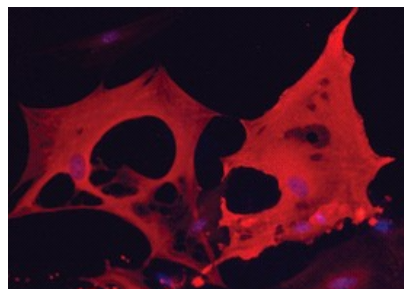
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse FABP4
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below

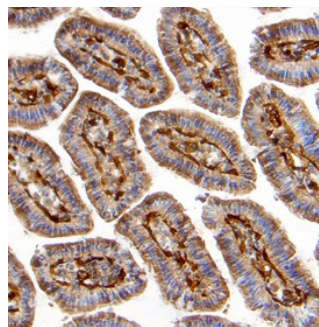
## DATA

### Immunocytochemistry



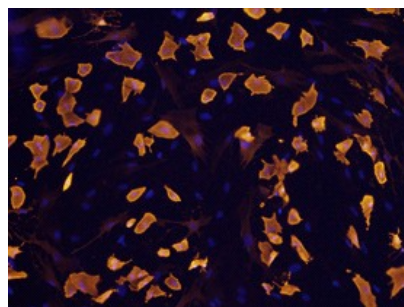
**FABP4 in Mouse Adipocytes.** FABP4 was detected in immersion fixed mouse mesenchymal stem cell-derived adipocytes using 10 µg/mL Mouse FABP4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1443) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat 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 Mouse 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 Mouse 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

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

### 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 $\gamma$  fatty acid ligands as they enter the nucleus. These ligands, or fatty acids, facilitate PPAR $\gamma$ -mediated gene transcription. Mouse FABP-4 is 132 amino acids (aa) in length. It is a two  $\beta$ -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.