**DESCRIPTION**

**Species Reactivity** Human

**Specificity** Detects human FABP5/E-FABP in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human FABP1, 2, 3, 4, 6, 7, or 9 is observed.

**Source** Monoclonal Rat IgG2A Clone # 311215

**Purification** Protein A or G purified from hybridoma culture supernatant

**Immunogen** E. coli-derived recombinant human FABP5/E-FABP Ala2-Glu135
Accession # Q01469

**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.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>1 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>Flow Cytometry</td>
<td>0.25 μg/10⁶ cells</td>
<td>HUVEC human umbilical vein endothelial cells</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>8-25 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>CyTOF-ready</td>
<td></td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
</tr>
</tbody>
</table>

**DATA**

**Western Blot**

Detection of Human FABP5/E-FABP by Western Blot. Western blot shows lysates of human heart tissue, human brain (cerebellum) tissue, and human placenta tissue. PVDF membrane was probed with 1 μg/mL of Rat Anti-Human FABP5/E-FABP Monoclonal Antibody (Catalog # MAB3077) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for FABP5/E-FABP at approximately 15 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunocytochemistry**

FABP5 in HUVEC Human Cells. FABP5 was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Rat Anti-Human FABP5 Monoclonal Antibody (Catalog # MAB3077) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (yellow; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 0.5 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.

- 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**

FABP5, also known as epidermal fatty acid binding protein (E-FABP), is expressed in skin, lens, adipose tissue, endothelial cells, heart, brain and placenta. FABP5 is associated with keratinocytes and adipocytes, and is suggested to promote fatty acid availability to enzymes, protect cell structures from fatty acid attack, and target fatty acids to nuclear transcription factors. Human FABP5 shares 80%, 81%, and 92% aa identity with mouse, rat and bovine FABP5, respectively.

Rev. 2/7/2018 Page 1 of 1