

## ORDERING INFORMATION

**Catalog Number:** MAB3077

**Clone:** 311215

**Lot Number:** WGQ01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS  
with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human FABP5

**Immunogen:** *E. coli*-derived rhFABP5

**Ig class:** rat IgG<sub>2a</sub>

**Recommended Applications:**

Immunocytochemistry  
Western blot  
Flow cytometry

**Other Application:**

Direct ELISA

### Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, *E. coli*-derived, recombinant human Fatty Acid Binding Protein 5 (rhFABP5; aa 1 - 135). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. 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 mediates fatty acid metabolism in epithelial cells and is also implicated in keratinocyte differentiation.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### Specificity

This antibody was selected for its ability to detect human FABP5 by immunocytochemistry. In direct ELISAs and western blots, this antibody shows no cross-reactivity with rhFABP-1, -2, -3, -4, -6, -7, or -9.

### Applications

**Western Blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human FABP5. Using a colorimetric detection system, the detection limit for rhFABP5 is approximately 25 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection with WesternGlo Chemiluminescent Detection Substrate (R&D Systems Catalog # AR004) will increase sensitivity by 5 to 50 fold.

**Immunocytochemistry** - This antibody was used at a concentration of 10 µg/mL to detect FABP5 on human HUVECs. Cells were fixed with PBS containing 4% paraformaldehyde for 20 minutes at room temperature and blocked with PBS containing 10% normal donkey serum, 0.1% Triton X-100, and 1% BSA for 45 minutes at room temperature. After blocking, cells were incubated with diluted primary antibody overnight at 4° C followed by Rhodamine Red-coupled anti-rat IgG at room temperature in the dark for one hour. Between each step, cells were washed with PBS containing 0.1% BSA.

**Flow Cytometry** - Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 2.5 x 10<sup>5</sup> cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding 10 µL of a 25 µg/mL stock solution of a secondary developing reagent such as goat anti-rat IgG conjugated to a fluorochrome.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human FABP5. The detection limit for rhFABP5 is approximately 3 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**