



Monoclonal Anti-human FABP5 Antibody

ORDERING INFORMATION

Catalog Number: MAB3077

Clone: 311215

Lot Number: WGQ02

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_{2A}

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 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 10⁵ 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.

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