



# Monoclonal Anti-rat FABP1 Antibody

## ORDERING INFORMATION

**Catalog Number:** MAB1565

**Clone:** 220119

**Lot Number:** JLC01

**Size:** 100 µg

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

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** rat FABP1

**Immunogen:** *E. coli*-derived rrFABP1

**Ig class:** mouse IgG<sub>2b</sub>

**Recommended Applications:**  
Western blot  
Immunohistochemistry

**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 mouse immunized with purified, *E. coli*-derived, recombinant rat fatty acid binding protein 1 (rrFABP1). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. FABP1, also known as liver FABP (L-FABP), Z-protein, and squalene- and sterol-carrier protein (SCP), is predominantly expressed in the liver, intestine, kidney and lung. FABP1 binds free fatty acids and their co-enzyme A derivatives and may be involved in intracellular lipid transport.

## Formulation

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

## Endotoxin Level

< 0.1 EU per 1 µg of the antibody as determined by the LAL method.

## Reconstitution

Reconstitute with sterile PBS. If 1 mL of PBS is used, the antibody concentration will be 100 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 rat FABP1 in direct ELISAs, western blots and immunohistochemistry experiments. In direct ELISAs and western blots, this antibody does not cross-react with rrFABP2, rhFABP3, rmFABP4 or rmFABP5.

## Applications

**Western Blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect rat FABP1. The detection limit for rrFABP1 is approximately 25 ng/lane under non-reducing and reducing conditions.

**Immunocytochemistry** - This antibody was used at a concentration of 10 µg/mL to detect FABP1 on rat liver cells. 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-mouse IgG at room temperature in the dark for one hour. Between each step, cells were washed with PBS containing 0.1% BSA.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect rat FABP1. The detection limit for rrFABP1 is approximately 5 ng/well.

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