

## ORDERING INFORMATION

**Catalog Number:** MAB1678

**Clone:** 242305

**Lot Number:** K1X01

**Size:** 100 µg

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

**Storage:** -20° C

**Reconstitution:** sterile PBS

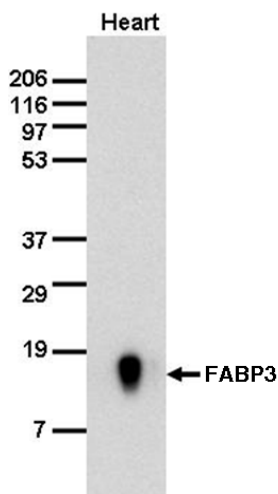
**Specificity:** human FABP3

**Immunogen:** *E. coli*-derived rhFABP3

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

### Recommended Applications:

Western blot  
Immunohistochemistry



### Detection of human FABP3 with MAB1678.

Lysates were prepared from human heart in reducing sample buffer, resolved by SDS-PAGE (30 µg total protein/lane), and transferred to an Immobilon-P membrane. The blot was developed with 2 µg/mL MAB1678 and chemiluminescent detection substrate.

## Background

Fatty Acid Binding Protein 3 (FABP3), also known as FABP-Heart (H-FABP), FABP-Muscle (M-FABP) and mammary-derived growth inhibitor (MDGI), is a member of the intracellular FABP family. It plays a role in the transport of long chain fatty acids in the cytoplasm.

## 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 FABP3 (rhFABP3; aa 1 - 133; Accession # P05413). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

## Formulation

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

## Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 200 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 detects human FABP3 in Western blots. In Western blots, this antibody shows approximately 15% cross-reactivity with rrFABP2 and no cross-reactivity with rrFABP1, rmFABP4 or rmFABP5.

## Applications

**Western blot** - This antibody can be used at 2 µg/mL with the appropriate secondary reagents to detect human FABP3 in cell or tissue extracts. Refer to <http://www.RnDSYSTEMS.com/go/WBCellLysates> for detailed procedures for preparing lysates and Western blotting. The specific buffers are listed below.

Blotting Buffer	Blocking Solution	Antibody Solution
25 mM Tris, pH 7.4	5% nonfat dry milk	5% nonfat dry milk
0.15 M NaCl	in Blotting Buffer	in Blotting Buffer
0.05% Tween <sup>®</sup> 20		

**Immunohistochemistry** - This antibody was used at a concentration of 5 - 10 µg/mL to detect FABP3 on frozen fetal heart tissue sections. Sections 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<sup>®</sup> X-100, 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<sup>™</sup>-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.

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

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

**R&D Systems, Inc.**  
**1-800-343-7475**

Tween is a registered trademark of ICI Americas.

Triton is a registered trademark of Union Carbide Corp.

Rhodamine Red is a trademark of Invitrogen, Inc.

9/15/09