

For Research Use Only

# FABP4 Polyclonal antibody

Catalog Number: 12802-1-AP

Featured Product

131 Publications



## Basic Information

### Catalog Number:

12802-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3912

### GenBank Accession Number:

BC003672

### GeneID (NCBI):

2167

### UNIPROT ID:

P15090

### Full Name:

fatty acid binding protein 4, adipocyte

### Calculated MW:

132 aa, 15 kDa

### Observed MW:

15 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:2000-1:8000

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, hamster, sheep, geese

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: RAW 264.7 cells, MC38 cells, mouse adipose tissue, mouse skeletal muscle tissue, rat heart tissue

**IHC**: mouse skin tissue, human heart tissue, human ovary tumor tissue, rat brown adipose tissue

## Background Information

Fatty acid binding protein (FABP) 4 is a member of the FABP family which abundantly expressed, fatty acid carrier proteins. FABPs are capable of binding a variety of hydrophobic molecules such as long-chain fatty acids and are important for their uptake and intracellular trafficking. It was first identified as an adipocyte-specific protein, important for the maintenance of lipid and glucose metabolism. It is also detected in macrophages, where it participates in regulating inflammation and cholesterol trafficking via NFκB and PPAR. In more recent studies, FABP4 has been found in a variety of endothelial cells, where it has been identified as a target of VEGF and a regulator of cell proliferation and possibly angiogenesis. Pathologically, FABP4 has been associated with the development of metabolic syndrome, diabetes and cancer and vulnerability of atherosclerotic plaques. FABP4 has been identified as a novel prognostic factor for both adverse cardiovascular events and breast cancer.

## Notable Publications

| Author       | Pubmed ID | Journal         | Application |
|--------------|-----------|-----------------|-------------|
| Yunjiao Wang | 31557405  | J Cell Mol Med  | WB          |
| Wei-Jie Zang | 34558731  | J Clin Lab Anal | IHC         |
| Zunzhe Wang  | 34514716  | J Cell Mol Med  | IHC         |

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

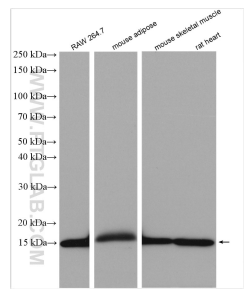
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

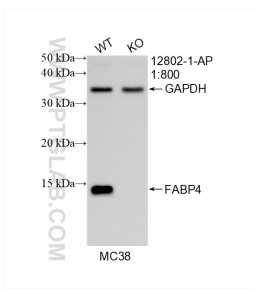
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

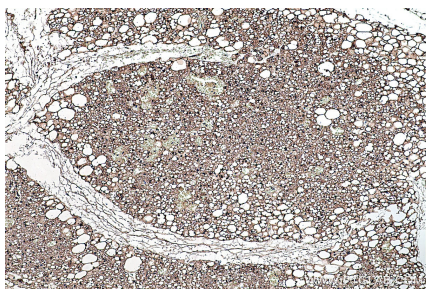
Selected Validation Data



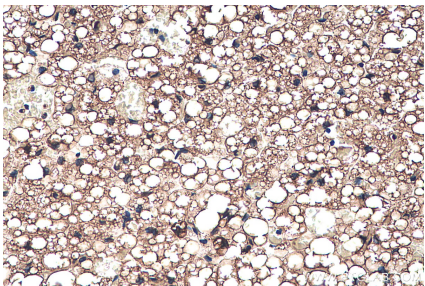
Various lysates were subjected to SDS PAGE followed by western blot with 12802-1-AP (FABP4 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



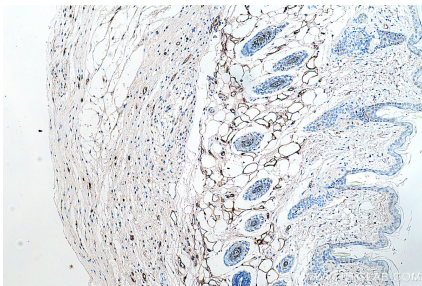
WB result of FABP4 antibody (12802-1-AP; 1:800; room temperature for 1.5 hours) with wild-type and FABP4 knockout MC 38 cells.



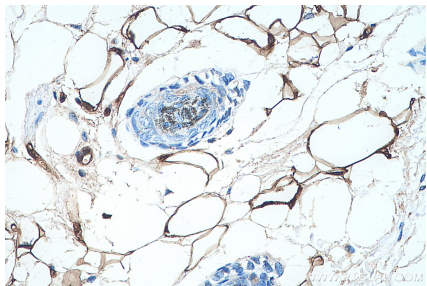
Immunohistochemical analysis of paraffin-embedded rat brown adipose slide using 12802-1-AP (FABP4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat brown adipose slide using 12802-1-AP (FABP4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skin tissue slide using 12802-1-AP (FABP4 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse skin tissue slide using 12802-1-AP (FABP4 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).