

## FABP4 Protein, Mouse, Recombinant (His)

### General Information

Synonyms:	ALBP/Ap2/Lbpl;422/aP2;Ap2;fatty acid binding protein 4, adipocyte
Protein Construction:	A DNA sequence encoding the mouse FABP4 (NP_077717.1) (Met 1-Ala 132) was expressed, with a C-terminal polyhistidine tag. Predicted N terminal: Met 1
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	P04117
Molecular Weight:	16 kDa (predicted); 15 kDa (reducing condition, due to glycosylation)

### QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

### Preparation and Storage

Reconstitution:	Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.
Stability & Storage:	It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots. <small>Actual storage temperature shall be subject to the COA.</small>
Shipping:	In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

Fatty acid-binding protein, adipocyte, also known as Adipocyte-type fatty acid-binding protein, Fatty acid-binding protein 4, Adipocyte lipid-binding protein, and FABP4, is a cytoplasm protein which belongs to the calycin superfamily and Fatty-acid binding protein (FABP) family. In familial combined hyperlipidemia (FCHL), FABP4 correlated to body mass index (BMI), waist circumference and homeostasis model assessment (HOMA) index. FABP4 levels were associated with triglyceride-rich lipoproteins. In humans serum FABP4 levels correlate

significantly with features of PCOS. It appears to be a determinant of atherogenic dyslipidemia. FABP4 pathway mediates the sebaceous gland hyperplasia in keratinocyte-specific Pten-null mice. FABP4 concentration significantly increased with an increasing of MS features and was strongly correlated with body-mass index, triglycerides, HDL-cholesterol concentrations and blood pressure. Patients in the highest quartile of FABP4 presented a six-fold increased odds ratio for MS and a three-fold increased odds for LD, adjusted by age, sex, body-mass index and the antiretroviral therapy. FABP4 is a strong plasma marker of metabolic disturbances in HIV-infected patients, and therefore, could serve to guide therapeutic intervention in this group of patients.

### Reference

van Dongen, M.J. et al., 2002, J Am Chem Soc. 124 (40): 11874-80.

Coll, B. et al., 2008, Atherosclerosis 199 (1):147-53.

Hoashi, S. et al., 2008, BMC Genet. 9 :84.

Cai, H. et al., 2010, Bioorg Med Chem Lett 20 (12):3675-9.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481