Data Sheet (Cat.No.TMPY-01878)

TargetMol

L-FABP Protein, Human, Recombinant (His)

General Information

Synonyms:	fatty acid binding protein 1, liver;FABPL;L-FABP
Protein Construction:	A DNA sequence encoding the human FABP1 (NP_001434.1) (Ser 2-Ile 127) was expressed, with a polyhistide tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	E. coli
Accession:	P07148
Molecular Weight:	15.6 kDa (predicted); 15 kDa (reducing conditions)

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:	> 97 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 8.3. 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.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Fatty acid-binding protein, liver, also known as Fatty acid-binding protein 1, Liver-type fatty acid-binding protein, FABP1 and FABPL,is a cytoplasm protein which belongs to thecalycin superfamily and Fatty-acid binding protein (FABP) family. Fatty acid binding proteins are a family of small, highly conserved, cytoplasmic proteins that bind long-chain fatty acids and other hydrophobic ligands. FABP1 and FABP6 (the ileal fatty acid binding protein) are also able to bind bile acids. It is thought that FABPs roles include fatty acid uptake, transport, and metabolism.

FABP1 / FABPL binds free fatty acids and their coenzyme A derivatives, bilirubin, and some other small molecules in the cytoplasm. It forms a beta-barrel structure that accommodates hydrophobic ligands in its interior. FABP1 / FABPL may be involved in intracellular lipid transport.

Reference

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Weickert MO, et al.,2007, Am J Physiol Endocrinol Metab. 293(4): E1078-84.
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Fisher,E. et al., 2007, Mol Genet Metab. 91 (3):278-84.

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