

## FABP7 Protein, Human, Recombinant

### General Information

Synonyms:	fatty acid binding protein 7, brain;FABPB;MRG;B-FABP;BLBP;RP11-548E19.1;LTR2-FABP7
Protein Construction:	A DNA sequence encoding the mature form of human FABP7 (O15540) (Met1-Ala132) was expressed. Predicted N terminal: Met
Species:	Human
Expression Host:	E. coli
Accession:	O15540
Molecular Weight:	14.9 kDa (predicted); 16 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:	> 95 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 $\mu$ m 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:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

#### 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

BLBP, also known as FABP7, is a brain fatty acid binding protein. Fatty acid binding proteins (FABPs) are a family of small, highly conserved, cytoplasmic proteins that bind long-chain fatty acids and other hydrophobic ligands. FABP7 binds DHA with the highest affinity among all of the FABPs. FABPs may play roles in fatty acid uptake, transport, and metabolism. BLBP is expressed, during development, in radial glia by the activation of notch receptors. It was shown that reelin induces FABP7 expression in neural progenitor cells via notch-1 activation.

BLBP variation is linked to weak prepulse inhibition(PPI) in mice and deficit in PPI is an endophenotypic trait observed in schizophrenia patients and their relatives.

### Reference

Shi YE,et al.(1997) Antitumor activity of the novel human breast cancer growth inhibitor, mammary-derived growth inhibitor-related gene, MRG. *Cancer Res.* 57(15):3084-91.

Young JK,et al.(1997) Immunoreactivity for brain-fatty acid binding protein in gomori-positive astrocytes. *Glia.* 16(3):218-26.

Xu LZ,et al.(1996) Ligand specificity of brain lipid-binding protein. *J Biol Chem.* 271(40): 24711-9.

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