



LD Biopharma, Inc.
9924 Mesa Rim Road, Suite B
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human FABP6 Protein
Catalog Number: hRP-1846
Manufacturer: LD Biopharma, Inc.

Introduction

The fatty-acid-binding proteins (FABPs) are a family of transport proteins for fatty acids and other lipophilic substances such as eicosanoids and retinoids. These proteins are thought to facilitate the transfer of fatty acids between extra- and intracellular membranes. Some family members are also believed to transport lipophilic molecules from outer cell membrane to certain intracellular receptors such as PPAR. Levels of fatty-acid-binding protein have been shown to decline with ageing in the mouse brain, possibly contributing to age-associated decline in synaptic activity. FABP6 (Gastrotropin) and FABP1 protein are mainly expressed in human liver (the ileal fatty acid binding protein) are also able to bind bile acids. FABP6 plays an important role in regulation of cholesterol uptake in liver.

Full-length of human FABP6 cDNA (127aa, derived from BC022489) was constructed with codon optimization and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein was expressed in E. coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: FABP6 (I-15P; I-BABP; I-BAP; ILBP3; ILLBP)
Accession Number: NP_001436
Species: Human
Size: 50 µg / Vial
Composition: 1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose and DTT.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Horvath G, et al., *Temperature dependence of backbone dynamics in human ileal bile*



LD Biopharma, Inc.
9924 Mesa Rim Road, Suite B
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

acid-binding protein: implications for the mechanism of ligand binding. *Biochemistry* 53 (31), 5186-5198 (2014)

Turpin ER, et al., *Cooperativity and site selectivity in the ileal lipid binding protein.* *Biochemistry* 52 (27), 4723-4733 (2013)

Fang C, et al., *Unusual binding of ursodeoxycholic acid to ileal bile acid binding protein: role in activation of FXRalpha.* *J. Lipid Res.* 53 (4), 664-673 (2012)

Applications

1. May be used for in vitro FABP6 mediated long-chain fatty acid metabolism regulation study in FXRalpha pathway in liver for hepatocytes by intracellular delivery of this protein with ProFectin Reagent.
2. May be used for protein-protein interaction mapping.
3. As enzymatic substrate for various proteases.
4. As immunogen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGGFAFTGKFEMESEKKNYDEFMKLLGISSDVIEKAHNFK
IVTEVQQDGDFTWSQHYYGGHTMTNKF'TVGKESNIQTMGGKTFKATVQMEGGKLVVNF'PNYHQ
TSEIVGDKLVEVSTIGGVTYERVSKRLA