

Product Information

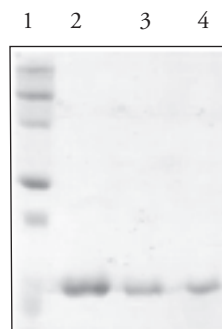


FABP1 (human recombinant)

Item No. 10009547 • Lot. No. XXXX

Synonyms:	Fatty Acid Binding Protein 1, L-FABP, Liver-FABP
Source:	Recombinant N-terminal hexahistidine-tagged protein expressed in <i>E. coli</i>
M_r:	18.3 kDa
Purity:	≥90%
Stability:	≥1 year -80°C
Supplied as:	A solution in 50 mM sodium phosphate, pH 7.2, containing 25% glycerol and 100 mM sodium chloride
Protein concentration:	XX mg/ml

Fatty acid binding protein 1 (FABP1) is one of nine known cytosolic fatty acid binding proteins ranging in size from 14-15 kDa containing 127-132 amino acids.¹ Members of this protein family exhibit high affinity for small lipophilic ligands and were named according to the tissue from which they were initially isolated.¹ Studies suggest that FABPs are involved in the uptake and metabolism of fatty acids, in the maintenance of cellular membrane fatty acid levels, in intracellular trafficking of these substrates, in the modulation of specific enzymes of lipid metabolic pathways, and in the modulation of cell growth and differentiation.² FABP family members have highly conserved three dimensional structures and 22-73% amino acid sequence similarity. FABP1 is composed of ten antiparallel β strands that form a barrel and have a bigger binding pocket than the other FABPs allowing it to accommodate two fatty acids into its binding pocket. Expression of FABP1 is decreased in hepatoblastoma and hepatocellular carcinoma making the protein a potential tumor marker. Moreover, studies have suggested FABP1 as a potential biomarker for both liver and kidney injury.¹



1. MW standards
2. FABP1 (5 μ g)
3. FABP1 (2.5 μ g)
4. FABP1 (1.25 μ g)

References

1. Zimmerman, A.W. and Veerkamp, J.H. New insights into the structure and function of fatty acid-binding proteins. *Cell. Mol. Life Sci.* **59**, 1096-1116 (2002).
2. Massolini, G. and Calleri, E. Survey of binding properties of fatty acid-binding proteins chromatographic methods. *J. Chromatogr. B* **797**, 255-268 (2003).

Related Products

FABP4 (murine recombinant) - Item No. 1005191 • FABP1 (rat recombinant) - Item No. 10005200 • FABP3 (human recombinant) - Item No. 10007432 • FABP5 (murine recombinant) - Item No. 10007433 • FABP2 (rat recombinant) - Item No. 10007938 • FABP4 (human recombinant) - Item No. 10009549 • FABP7 (human recombinant) - Item No. 10009551 • 1,8-ANS - Item No. 10010219 • FABP5 (human recombinant) - Item No. 10010364

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

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