

Product Information

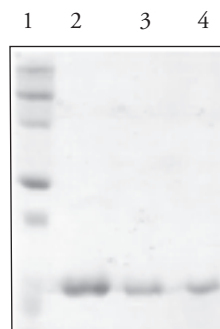


FABP1 (human recombinant)

Catalog 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:	≥6 months at -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 µg)
3. FABP1 (2.5 µg)
4. FABP1 (1.25 µg)

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

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com

WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

Copyright Cayman Chemical Company, 09/24/2007