

PRODUCT INFORMATION



FABP4 (human, recombinant)

Item No. 10009549

Overview and Properties

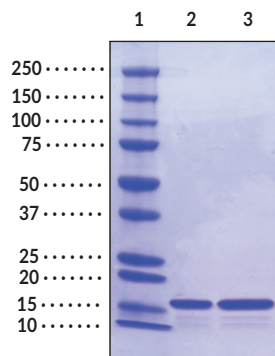
Synonyms: Adipocyte FABP, A-FABP, ALBP, aP2, Fatty Acid Binding Protein 4, Fatty Acid Binding Protein (Adipocyte)
Source: Recombinant hexahistidine-tagged protein expressed in *E. coli*
Amino Acids: 1-132 (full length)
Uniprot No.: P15090
Molecular Weight: 18.8 kDa
Storage: -80°C (as supplied)
Stability: ≥2 years
Purity: *batch specific* (≥90% estimated by SDS-PAGE)
Supplied in: 50 mM of sodium phosphate, pH 7.2, containing 100 mM sodium chloride and 20% glycerol

Protein

Concentration: *batch specific* mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Standard
Lane 2: FABP4 (2 µg)
Lane 3: FABP4 (4 µg)

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Fatty acid binding protein 4 (FABP4; adipocyte FABP) 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 Studies using FABP4 gene deletion in mice indicate a dominant role for FABP4 in several chronic metabolic diseases. Therefore, inhibiting the function of FABP4 is a potential mechanism for the treatment of metabolic diseases like diabetes and atherosclerosis.^{3,4}

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).
3. Furuhashi, M., Tuncman, G., Görgün, C.Z., *et al.* Treatment of diabetes and atherosclerosis by inhibiting fatty-acid-binding protein aP2. *Nature* **447**, 959-965 (2007).
4. Boord, J.B., Maeda, K., Makowski, L., *et al.* Adipocyte fatty acid-binding protein, aP2, alters late atherosclerotic lesion formation in severe hypercholesterolemia. *Arterioscler. Thromb. Vasc. Biol.* **22**, 1686-1691 (2002).

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