

# Product Information



## FABP4 (mouse recombinant)

Item No. 10005191 • Lot No. XXXX

<b>Synonyms:</b>	A-FABP, Adipocyte-FABP, ALBP, Fatty Acid Binding Protein 4
<b>Source:</b>	Recombinant N-terminal hexahistidine-tagged protein expressed in <i>E. coli</i>
<b>M<sub>r</sub>:</b>	19.5 kDa/subunit
<b>Purity:</b>	≥95%
<b>Stability:</b>	≥1 year at -80°C
<b>Supplied as:</b>	A solution in 50 mM sodium phosphate, pH 7.2, containing 20% glycerol and 150 mM sodium chloride
<b>Protein concentration:</b>	<i>lot specific</i> mg/ml

### Laboratory Procedures

Fatty acid binding protein 4 (FABP4) is one of nine known cytosolic FABPs ranging in size from 14-15 kDa containing 127-132 amino acids.<sup>1</sup> 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.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3,4</sup>

### 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).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10005191](http://www.caymanchem.com/catalog/10005191)

### 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](mailto:custserv@caymanchem.com)

**Web**  
[www.caymanchem.com](http://www.caymanchem.com)

**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

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 *via* email to 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, 02/01/2012