

PRODUCT INFORMATION



FABP4 (human recombinant) FITC conjugated

Item No. 9001068

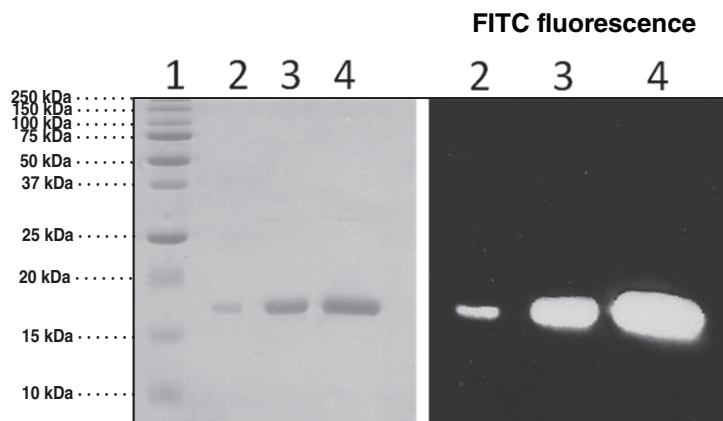
Overview and Properties

Synonyms: Adipocyte FABP, A-FABP, ALBP, aP2, Fatty Acid Binding Protein 4
Source: Recombinant N-terminal His-tagged protein expressed in *E. coli*
Amino Acids: 1-132 (full-length)

Batch specific information can be found on the Certificate of Analysis or by contacting Technical Support

Molecular Weight: 19 kDa
Storage: -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein
Stability: As supplied, 9 months from the QC date provided on the Certificate of Analysis, when stored properly
Purity: *batch specific* ($\geq 95\%$ estimated by SDS-PAGE)
Supplied in: 50 mM sodium phosphate, pH 7.2, containing 100 mM sodium chloride and 20% glycerol
Protein Concentration: *batch specific* mg/ml

Image



Lane 1: MW Markers
Lane 2: FABP-FITC (1 µg)
Lane 3: FABP-FITC (5 µg)
Lane 4: FABP-FITC (10 µg)

Representative gel image shown; actual purity may vary between each batch.

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

FABP4 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. FABP4 is composed of ten antiparallel β strands that form a barrel. FABP4 is a fat cell specific protein involved in facilitating the bidirectional flux of fatty acids into and out of the adipocyte in response to insulin and epinephrine.³⁻⁵

References

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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. Trillou, C.R., Arnone, M., Delgorge, C., *et al.* Anti-obesity effect of SR141716, a CB₁ receptor antagonist, in diet-induced obese mice. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* **284**, R345-R353 (2003).
4. Hotamisligil, G.S., Johnson, R.S., Distel, R.J., *et al.* Uncoupling of obesity from insulin resistance through a targeted mutation in aP2, the adipocyte fatty acid binding protein. *Science* **274**, 1377-1379 (1996).
5. Uysal, K.T., Scheja, L., Wiesbrock, S.M., *et al.* Improved glucose and lipid metabolism in genetically obese mice lacking aP2. *Endocrinology* **141**(9), 3388-3396 (2000).

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