

Product Information



FABP2 Blocking Peptide

Item No. 10010020

Fatty acid binding protein 2 (FABP2) is one of nine known cytosolic FABPs ranging in size from 14-15 kDa containing 127-133 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. 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 regulation 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. FABP2 is composed of ten antiparallel β strands that form a barrel that binds ligand in a bent conformation. FABP2 polymorphism has been suggested to be associated with gender specific obesity and increased risk of diabetes.¹

Laboratory Procedures

This vial contains 200 μ g peptide in 200 μ l TBS, pH 7.4, containing 0.1% BSA and 0.02% sodium azide. The FABP2 blocking peptide (human amino acids 33-40) can be used in conjunction with Cayman's FABP2 Polyclonal Antibody (Item No. 10010019) to block protein-antibody complex formation during immunochemical analysis of FABP2.

Store this peptide solution at -20°C. It will be stable for at least two years. To block antibody/protein complex formation, the following procedure is recommended:

1. Mix the FABP2 Polyclonal Antibody (Item No. 10010019) and blocking peptide together in a 1:1 (v/v) ratio in a microfuge tube. For example, mix 40 μ l of antibody and 40 μ l of peptide.*
2. Incubate for one hour at room temperature with occasional mixing.
3. Dilute the mixture to the final working antibody concentration and apply to the slide or membrane as usual.

*This is a recommended mixture. The minimum amount of peptide needed for complete blocking has not been precisely determined and may vary depending on the sample being analyzed. The amount of peptide required may need to be increased if sufficient blocking does not occur.

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

For a list of related products please visit: www.caymanchem.com/catalog/10010020

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 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, 07/23/2012