Product Information

FABP2 Blocking Peptide

Catalog 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 µg peptide in 200 µl 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 (Catalog 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 (Catalog No. 10010019) and blocking peptide together in a 1:1 (v/v) ratio in a microfuge tube. For example, mix 40 µl of antibody and 40 µl of peptide.*
2. Incubate for 1 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 Product

FABP2 Polyclonal Antibody - Cat. No. 10010019

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