PRODUCT INFORMATION

FABP6 Rabbit Monoclonal Antibody (Clone 009)

Item No. 37083

Overview and Properties

Contents:	This vial contains 50 or 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	Fatty Acid-binding Protein 6, I-BALB, Ileal Lipid-binding Protein, ILLBP, Intestinal Bile Acid-binding Protein
Immunogen:	Recombinant human FABP6 protein
Species Reactivity:	(+) Human; other species not tested
Form:	Liquid
Storage:	-80°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered solution in PBS
Clone:	009
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA; the recommended starting dilution is 1:5,000-1:10,000. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Description

Fatty acid-binding protein 6 (FABP6) is a member of the intracellular lipid-binding protein (iLBP) family with a role in bile acid homeostasis.[1,2] It is composed of 10 antiparallel β-strands, which form a β-barrel containing a lipid binding site and is expressed primarily in enterocytes of the ileum, and to a lesser extent in the adrenal gland, ovaries, and stomach.[1,3,4] FABP6 binds bile acids and fatty acids and interacts with the ileal bile acid transporter to aid in bile acid uptake and facilitate intracellular trafficking of bile acids.[1] *Fabp6* knockdown induces dietary fat malabsorption, decreased bile acid reabsorption, and a sex-specific increase in adiposity in mice fed a Western diet.[5] Serum levels of FABP6 are increased in patients with colorectal cancer and decrease following surgical removal of cancerous tissues.[6] FABP6^{T79M} is associated with a decreased risk of type 2 diabetes in obese individuals.[7] Cayman's FABP6 Rabbit Monoclonal Antibody (Clone 009) can be used for ELISA.

References

1. Smathers, R.L. and Petersen, D.R. The human fatty acid-binding protein family: Evolutionary divergences and functions. *Hum. Genomics* **5(3),** 170-191 (2011).
2. Hendrick, A.G., Müller, I., Willems, H., *et al.* Identification and investigation of novel binding fragments in the fatty acid binding protein 6 (FABP6). *J. Med. Chem.* **59(17),** 8094-8102 (2016).
3. Storch, J. and McDermott, L. Structural and functional analysis of fatty acid-binding proteins. *J. Lipid Res.* **50 Suppl(Suppl),** S126-S131 (2009).
4. Kim, K., Cistola, D.P., and Frieden, C. Intestinal fatty acid-binding protein: The structure and stability of a helix-less variant. *Biochemistry* **35(23),** 7553-7558 (1996).
5. Habib, S.M., Zwicker, B.L., Wykes, L., *et al.* Sexually dimorphic response of mice to the Western-style diet caused by deficiency of fatty acid binding protein 6 (Fabp6). *Physiol. Rep.* **9(3),** e14733 (2021).
6. Zhang, Y., Zhao, X., Deng, L., *et al.* High expression of FABP4 and FABP6 in patients with colorectal cancer. *World J. Surg. Oncol.* **17(1),** 171 (2019).
7. Fisher, E., Grallert, H., Klapper, M., *et al.* Evidence for the Thr79Met polymorphism of the ileal fatty acid binding protein (FABP6) to be associated with type 2 diabetes in obese individuals. *Mol. Genet. Metab.* **98(4),** 400-405 (2009).

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