PRODUCT INFORMATION



FABP6 Rabbit Monoclonal Antibody (Clone 201)

Item No. 37084

Overview and Properties

Contents: Synonyms:	This vial contains 50 or 100 μ l of protein A-affinity purified monoclonal antibody. Fatty Acid-binding Protein 6, I-BALB, Ileal Lipid-binding Protein, ILLBP, Intestinal Bile Acid-binding Protein
Immunogen:	Recombinant human FABP6
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:	201
Host:	Rabbit
Isotype:	lgG
Applications:	Flow cytometry (FC), immunocytochemistry (ICC), and immunofluorescence (IF); the recommended starting dilution for FC is 1:25-1:100 and 1:20-1:100 for ICC and IF. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Immunofluorescent staining of human FABP6 cells in MCF-7 cells. The positive cytoplasm staining was visualized in green with Cayman's FABP6 Rabbit Monoclonal Antibody (Clone 201) (Item No. 37084).



Flow cytometric analysis of human FABP6 expression in MCF-7 cells. The cells were treated according to manufacturer's manual (BD Pharmingen™), stained with FABP6 Rabbit Monoclonal Antibody (Clone 201), then visualized with a FITC-conjugated secondary antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.

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

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 201) can be used for flow cytometry (FC), immunocytochemistry (ICC), and immunofluorescence (IF) applications.

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).
- 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).
- Storch, J. and McDermott, L. Structural and functional analysis of fatty acid-binding proteins. J. Lipid Res. 50 Suppl(Suppl), S126-S131 (2009).
- 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).
- 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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