

PRODUCT INFORMATION



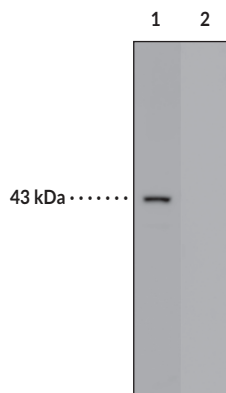
FFAR4 (GPR120) (C-Term) Polyclonal Antibody

Item No. 14265

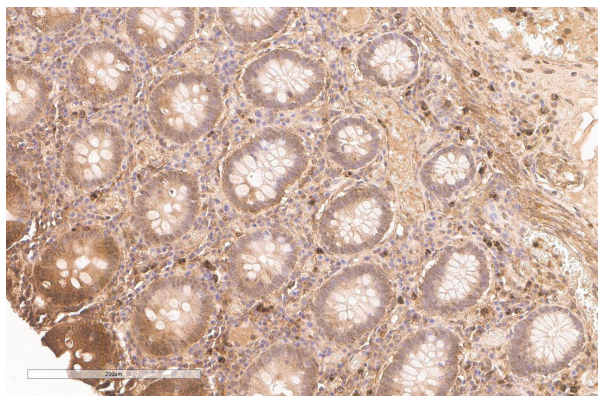
Overview and Properties

Contents:	This vial contains peptide affinity-purified polyclonal antibody
Synonyms:	Free Fatty Acid Receptor 4, GPCR129, G Protein-Coupled Receptor 120, GT01, O3FAR1, PGR4
Immunogen:	Synthetic peptide from the C-terminal region of human FFAR4
Species Reactivity:	(+) Human, other species not tested
Uniprot No.:	Q5NUL3
Form:	Lyophilized
Storage:	-20°C (as supplied)
Stability:	≥3 Years
Storage Buffer:	TBS, pH 7.4 when reconstituted in 500 µl deionized water
Host:	Rabbit
Applications:	ELISA, Immunocytochemistry (ICC), Immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution for ELISA is 1:500-1:2,000, 1:100-1:200 for ICC, and 1:200 for IHC and WB. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

Images



Lane 1: LoVo cell lysates (50 µg)
Lane 2: LoVo cell lysates treated with immunizing peptide (50 µg)



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human colon tissue after heat induced antigen retrieval in pH 6.0 citrate buffer. After incubation with FFAR4 (GPR120) (C-Term) Polyclonal Antibody (Item No. 14265) at a 1:200 dilution, slides were incubated with biotinylated secondary antibody, followed by alkaline phosphatase-streptavidin and chromogen (DAB).

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

G Protein-Coupled Receptor 120 (GPR120) is a GPCR activated by the presence of long chain free fatty acids and is expressed in adipocytes and pro-inflammatory macrophages.¹ The activation of GPR120 results in elevated Ca^{2+} and activation of the ERK cascade.¹ ω -3 Fatty acid constituents such as DHA and EPA mediate GPR120 signaling resulting in inhibition of TLR and TNF- α inflammatory signaling pathways in a β -arrestin2/TAB1 dependent manner.² The anti-inflammatory effects of GPR120 are indirectly involved in promoting insulin secretion and free fatty acid-induced inhibition of apoptosis.¹ The predicted size for GPR120 is 42.2 kDa and the observed detection is approximately 43 kDa by Western blot.

References

1. Katsuma, S., Hatae, N., Yano, T., *et al.* Free fatty acids inhibit serum deprivation-induced apoptosis through GPR120 in a murine enteroendocrine cell line STC-1. *J. Biol. Chem.* **280**(20), 19507-19515 (2005).
2. Oh, D.Y., Talukdar, S., Bae, E.J., *et al.* GPR120 is an omega-3 fatty acid receptor mediating potent anti-inflammatory and insulin sensitizing effects. *Cell* **142**(5), 687-698 (2010).

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