

PRODUCT INFORMATION



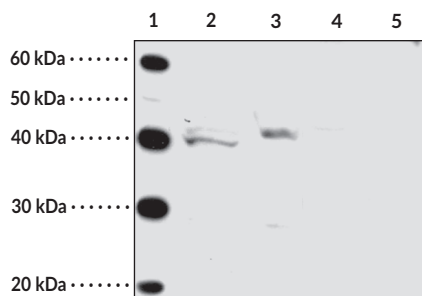
FFAR4 (GPR120) (Internal) Polyclonal Antibody

Item No. 14904

Overview and Properties

Contents:	This vial contains 500 µl of peptide affinity-purified polyclonal antibody.
Synonyms:	Free Fatty Acid Receptor 4, GPCR129, G Protein-Coupled Receptor 120, GPR120, GPR129, O3FAR1, PGR4
Immunogen:	Synthetic peptide from the internal region of human FFAR4 (GPR120)
Species Reactivity:	(+) Human, other species not tested
Uniprot No.:	Q5NUL3
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02 % sodium azide
Host:	Rabbit
Applications:	ELISA and Western blot (WB); recommended starting dilution for ELISA and WB is 1:200. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

Image



Lane 1: MW Markers
Lane 2: LoVo cell lysates (20 µg)
Lane 3: PC3 cell lysates (40 µg)
Lane 4: LoVo cell lysates (20 µg) + immunizing peptide
Lane 5: PC3 cell lysates (40 µg) + immunizing peptide

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

GPR120 is a G protein-coupled receptor (GPR) expressed in adipocytes and pro-inflammatory macrophages that is activated by long chain free fatty acids.¹ The activation of GPR120 results in elevated calcium ions and activation of the ERK cascade.¹ ω -3 Fatty acids, such as docosahexaenoic acid and eicosapentaenoic acid initiate GPR120 signaling resulting in inhibition of lipopolysaccharide and TNF- α inflammatory signaling pathways in a β -arrestin2/TAB1 dependant manner.² The anti-inflammatory effects of GPR120 are indirectly involved with promoting insulin secretion.¹ GPR120 also mediates free fatty acid induced apoptosis inhibition in the enteroendocrin cell line STC-1.¹ Cayman's internal polyclonal antibody detects GPR120 in LoVo and PC3 cell lysates. The predicted size for GPR120 is 42.2 kDa and the observed size is approximately 40 kDa by WB.

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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