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Datasheet for ABIN1694565
anti-FFAR2 antibody (AA 41-140) (AbBy Fluor® 488)

Overview

Quantity:	100 µL
Target:	FFAR2
Binding Specificity:	AA 41-140
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This FFAR2 antibody is conjugated to AbBy Fluor® 488
Application:	Western Blotting (WB), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Flow Cytometry (FACS)

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human GPR43
Isotype:	IgG
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Human
Purification:	Purified by Protein A.

Target Details

Target:	FFAR2
Alternative Name:	GPR43 (FFAR2 Products)

Target Details

Background:	<p>Synonyms: FFA2R, GPR43, Free fatty acid receptor 2, G-protein coupled receptor 43, FFAR2, FFA2, GPCR43</p> <p>Background: G protein-coupled receptor that is activated by a major product of dietary fiber digestion, the short chain fatty acids (SCFAs), and that plays a role in the regulation of whole-body energy homeostasis and in intestinal immunity. In omnivorous mammals, the short chain fatty acids acetate, propionate and butyrate are produced primarily by the gut microbiome that metabolizes dietary fibers. SCFAs serve as a source of energy but also act as signaling molecules. That G protein-coupled receptor is probably coupled to the pertussis toxin-sensitive, G(i/o)-alpha family of G proteins but also to the Gq family (PubMed:12496283, PubMed:12711604, PubMed:23589301). Its activation results in the formation of inositol 1,4,5-trisphosphate, the mobilization of intracellular calcium, the phosphorylation of the MAPK3/ERK1 and MAPK1/ERK2 kinases and the inhibition of intracellular cAMP accumulation. May play a role in glucose homeostasis by regulating the secretion of GLP-1, in response to short-chain fatty acids accumulating in the intestine. May also regulate the production of LEP/Leptin, a hormone acting on the central nervous system to inhibit food intake. Finally, may also regulate whole-body energy homeostasis through adipogenesis regulating both differentiation and lipid storage of adipocytes. In parallel to its role in energy homeostasis, may also mediate the activation of the inflammatory and immune responses by SCFA in the intestine, regulating the rapid production of chemokines and cytokines. May also play a role in the resolution of the inflammatory response and control chemotaxis in neutrophils. In addition to SCFAs, may also be activated by the extracellular lectin FCN1 in a process leading to activation of monocytes and inducing the secretion of interleukin-8/IL-8 in response to the presence of microbes (PubMed:21037097).</p>
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Gene ID:	2867
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UniProt:	O15552
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Application Details

Application Notes:	FCM 1:20-100 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200
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Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Handling

Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.
Expiry Date:	12 months