Datasheet for ABIN7564732

FFAR2 Protein (AA 1-330) (His tag)

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Overview

Quantity:	1 mg
Target:	FFAR2
Protein Characteristics:	AA 1-330
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FFAR2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Ffar2 Protein expressed in mammalien cells.
Sequence:	MTPDWHSSLI LTAYILIFLT GLPANLLALR AFMGRVRQPQ PAPVHILLLN LTLADLLLLL LLPFRIVEAA SNFRWYLPKI VCALTGFGFY SSIYCSTWLL AGISMERYLG VAFPVQYKLS RRPLYGVIAA LVAWIMSFGH CTIVIIVQYL NSTEQVGTEN QITCYENFTQ EQLDVVLPVR LELCLVLFFV PMAVTIFCYW RFVWIMLTQP HVGAQRRRRA VGLAVVTLLN FLVCFGPYNM SHLVGFYLRQ SPSWRVEAVV FSSLNASLDP LLFYFSSSVV RRAFGKGLLL IRNPASSMLG RGAKETVEGT KMDRGGSQAE GVQSSEFVTE **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits:

Product Details

	• Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	FFAR2
Alternative Name:	Ffar2 (FFAR2 Products)
Background:	Free fatty acid receptor 2 (G-protein coupled receptor 43) (Leukocyte-specific STAT-induced GPCR),FUNCTION: 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: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 (PubMed:22190648, PubMed:23589301). May also regulate the production of LEP/Leptin, a hormone acting on the central nervous system to inhibit food intake

Target Details

	(PubMed:20399779). Finally, may also regulate whole-body energy homeostasis through adipogenesis regulating both differentiation and lipid storage of adipocytes (PubMed:16123168, PubMed:23589301). 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 (PubMed:23665276). May also play a role in the resolution of the inflammatory response and control chemotaxis in neutrophils (PubMed:19917676, PubMed:19865172). 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. {ECO:0000269|PubMed:12684041, ECO:0000269|PubMed:16123168, ECO:0000269|PubMed:18499755, ECO:0000269|PubMed:19865172, ECO:0000269|PubMed:19917676, ECO:0000269|PubMed:20399779, ECO:0000269|PubMed:22190648, ECO:0000269|PubMed:23589301, ECO:0000269|PubMed:23665276}.
Molecular Weight:	37.1 kDa
UniProt:	Q8VCK6

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months