Datasheet for ABIN7548978

LACC1 Protein (AA 1-430) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	LACC1 (C13orf31)
Protein Characteristics:	AA 1-430
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LACC1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant LACC1 Protein expressed in mammalian cells.
Sequence:	MAEAVLIDLF GLKLNSQKNC HQTLLKTLNA VQYHHAAKAK FLCIMCCSNI SYERDGEQDN CEIETSNGLS ALLEEFEIVS CPSMAATLYT IKQKIDEKNL SSIKVIVPRH RKTLMKAFID QLFTDVYNFE FEDLQVTFRG GLFKQSIEIN VITAQELRGI QNEIETFLRS LPALRGKLTI ITSSLIPDIF IHGFTTRTGG ISYIPTLSSF NLFSSSKRRD PKVVVQENLR RLANAAGFNV EKFYRIKTHH SNDIWIMGRK EPDSYDGITT NQRGVTIAAL GADCIPIVFA DPVKKACGVA HAGWKGTLLG VAMATVNAMI AEYGCSLEDI VVVLGPSVGP CCFTLPRESA EAFHNLHPAC VQLFDSPNPC IDIRKATRIL LEQGGILPQN IQDQNQDLNL CTSCHPDKFF SHVRDGLNFG TQIGFISIKE **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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Product Details

Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	LACC1 (C13orf31)
Alternative Name:	LACC1 (C13orf31 Products)
Background:	Purine nucleoside phosphorylase LACC1 (EC 2.4.2.1) (Adenosine deaminase LACC1) (EC 3.5.4.4) (Fatty acid metabolism-immunity nexus) (Guanosine phosphorylase LACC1) (Laccase domain-containing protein 1) (S-methyl-5'-thioadenosine phosphorylase LACC1) (EC 2.4.2.28),FUNCTION: Purine nucleoside enzyme that catalyzes the phosphorolysis of adenosine, guanosine and inosine nucleosides, yielding D-ribose 1-phosphate and the respective free bases, adenine, guanine and hypoxanthine (PubMed:31978345). Also catalyzes the phosphorolysis of S-methyl-5'-thioadenosine into adenine and S-methyl-5-thio-alpha-D-ribose 1-phosphate (PubMed:31978345). Also has adenosine deaminase activity (PubMed:31978345). Acts as a regulator of innate immunity in macrophages by modulating the purine nucleotide metabolism, thereby regulating the metabolic function and bioenergetic state of macrophages (PubMed:31978345). Enables a purine nucleotide cycle between adenosine and inosine monophosphate and adenylosuccinate that prevents cytoplasmic acidification and balances the cytoplasmic-mitochondrial redox interface (PubMed:31978345). The purine

Target Details

	nucleotide cycle consumes aspartate and releases fumarate in a manner involving fatty acid oxidation and ATP-citrate lyase activity (PubMed:31978345). Participates in pattern recognition receptor (PRR)-induced cytokines in macrophages: associates with the NOD2-signaling complex and promotes optimal NOD2-induced signaling, cytokine secretion and bacterial clearance (PubMed:28593945, PubMed:31875558). Localizes to the endoplasmic reticulum upon PRR stimulation of macrophages and associates with endoplasmic reticulum-stress sensors, promoting the endoplasmic reticulum unfolded protein response (UPR) (PubMed:31875558). Does not show laccase activity (PubMed:27959965, PubMed:31978345). {ECO:0000269|PubMed:27959965, ECO:0000269|PubMed:28593945, ECO:0000269|PubMed:31875558, ECO:0000269|PubMed:31978345}.
Molecular Weight:	47.8 kDa
UniProt:	Q8IV20

Application Details

Application Notes:	We expect the protein to work for functional studies. 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