

Datasheet for ABIN7559056 LACC1 Protein (AA 1-430) (His tag)



Overview

Quantity:	1 mg
Target:	LACC1 (C13orf31)
Protein Characteristics:	AA 1-430
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LACC1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details	
Purpose:	Custom-made recombinat Lacc1 Protein expressed in mammalien cells.
Sequence:	MAEAVLIDLS GLQLNAQKNC HETLLETLDG IHYHHAPKAK FLCIICCRNA SKEKDGEYGL
	CELEAGNGFS RLAGKFETVS HPCLAASLYT IKQKIDEENL SCIKVIVPEH RKLLMKAYVG
	QLFTEVYEFE FEDLQGAWRD SLLKPSTGIN VTTTQELEDI QHEIETYLRS LPALKGDLTI
	VTSPLIPDNF LHGFTTRTGG ISSVPTLSSL NLFSSSKRRD PKVVVQENVR RLANAAGFNA
	EKFYRIKTDH ASEVWVMGKK EPESYDGIVT NQRGVTITAL GADCIPIVFA DPVKKACGVA
	HSGWKGTLLG VAMATVNAMI AEYGCDVEDI IVVLGPSVGS CCFTLPKESA VSFHSLHPSC
	VRHFDSPRPY VDIRKATRIL LERGGILPQN IQDQKEDLDL CTSCHPEKFF SHVRDGLNFG
	TQIGFISLRE 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:

- · 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: 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 (By similarity). Also catalyzes the phosphorolysis of S-methyl-5'-thioadenosine into adenine and S-methyl-5-thio-alpha-D-ribose 1-phosphate (By similarity). Also has adenosine deaminase activity (By similarity). 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:27478939, 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 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-induced cytokines in macrophages: associates with the NOD2-signaling complex and promotes optimal NOD2-induced signaling, cytokine secretion and bacterial clearance (By similarity). 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) (By similarity). Does not show laccase activity (By similarity). {ECO:0000250|UniProtKB:Q8IV20, ECO:0000269|PubMed:27478939, ECO:0000269|PubMed:31978345}.

Molecular Weight:

47.5 kDa

UniProt:

O8BZT9

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