Datasheet for ABIN7554466

LRRC8D Protein (AA 1-858) (His tag)

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Overview

Quantity:	1 mg
Target:	LRRC8D
Protein Characteristics:	AA 1-858
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LRRC8D protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant LRRC8D Protein expressed in mammalian cells.
Sequence:	MFTLAEVASL NDIQPTYRIL KPWWDVFMDY LAVVMLMVAI FAGTMQLTKD QVVCLPVLPS PVNSKAHTPP GNAEVTTNIP KMEAATNQDQ DGRTTNDISF GTSAVTPDIP LRATYPRTDF ALPNQEAKKE KKDPTGRKTN LDFQQYVFIN QMCYHLALPW YSKYFPYLAL IHTIILMVSS NFWFKYPKTC SKVEHFVSIL GKCFESPWTT KALSETACED SEENKQRITG AQTLPKHVST SSDEGSPSAS TPMINKTGFK FSAEKPVIEV PSMTILDKKD GEQAKALFEK VRKFRAHVED SDLIYKLYVV QTVIKTAKFI FILCYTANFV NAISFEHVCK PKVEHLIGYE VFECTHNMAY MLKKLLISYI SIICVYGFIC LYTLFWLFRI PLKEYSFEKV REESSFSDIP DVKNDFAFLL HMVDQYDQLY SKRFGVFLSE VSENKLREIS LNHEWTFEKL RQHISRNAQD KQELHLFMLS GVPDAVFDLT DLDVLKLELI PEAKIPAKIS QMTNLQELHL CHCPAKVEQT AFSFLRDHLR CLHVKFTDVA EIPAWVYLLK NLRELYLIGN LNSENNKMIG LESLRELRHL KILHVKSNLT KVPSNITDVA PHLTKLVIHN DGTKLLVLNS LKKMMNVAEL ELQNCELERI PHAIFSLSNL QELDLKSNNI RTIEEIISFQ HLKRLTCLKL WHNKIVTIPP SITHVKNLES LYFSNNKLES

Product Details

	LPVAVFSLQK LRCLDVSYNN ISMIPIEIGL LQNLQHLHIT GNKVDILPKQ LFKCIKLRTL NLGQNCITSL PEKVGQLSQL TQLELKGNCL DRLPAQLGQC RMLKKSGLVV EDHLFDTLPL EVKEALNQDI NIPFANGI **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.
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:	LRRC8D
Alternative Name:	LRRC8D (LRRC8D Products)
Background:	Volume-regulated anion channel subunit LRRC8D (Leucine-rich repeat-containing protein 5) (Leucine-rich repeat-containing protein 8D) (HsLRRC8D),FUNCTION: Non-essential component of the volume-regulated anion channel (VRAC, also named VSOAC channel), an anion channel required to maintain a constant cell volume in response to extracellular or intracellular osmotic changes (PubMed:24790029, PubMed:26530471, PubMed:26824658, PubMed:28193731, PubMed:32415200). The VRAC channel conducts iodide better than chloride and can also

Target Details

	conduct organic osmolytes like taurine (PubMed:24790029, PubMed:26824658, PubMed:28193731). Plays a redundant role in the efflux of amino acids, such as aspartate, in response to osmotic stress (PubMed:28193731). LRRC8A and LRRC8D are required for the uptake of the drug cisplatin (PubMed:26530471). Channel activity requires LRRC8A plus at least one other family member (LRRC8B, LRRC8C, LRRC8D or LRRC8E), channel characteristics depend on the precise subunit composition (PubMed:24782309, PubMed:24790029, PubMed:26824658, PubMed:28193731). Also acts as a regulator of glucose-sensing in pancreatic beta cells: VRAC currents, generated in response to hypotonicity- or glucose-induced beta cell swelling, depolarize cells, thereby causing electrical excitation, leading to increase glucose sensitivity and insulin secretion (By similarity). VRAC channels containing LRRC8D inhibit transport of immunoreactive cyclic dinucleotide GMP-AMP (2'-3'-cGAMP), an immune messenger produced in response to DNA virus in the cytosol (PubMed:33171122). Mediates the import of the antibiotic blasticidin-S into the cell (PubMed:24782309). {ECO:0000250|UniProtKB:Q8BGR2, ECO:0000269|PubMed:24782309, ECO:0000269|PubMed:24790029, ECO:0000269|PubMed:26530471, ECO:0000269|PubMed:26824658, ECO:0000269|PubMed:28193731, ECO:0000269|PubMed:32415200, ECO:0000269|PubMed:33171122}.
Molecular Weight:	98.2 kDa
UniProt:	Q7L1W4

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