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Datasheet for ABIN3093624
LRRC8A Protein (AA 343-810) (His tag)

Overview

Quantity:	1 mg
Target:	LRRC8A
Protein Characteristics:	AA 343-810
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This LRRC8A protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS), Crystallization (Crys)

Product Details

Sequence: MLRRSLKKYS FESIREESSY SDIPDVKNDF AFMLHLIDQY DPLYSKRFAV FLSEVSENKL
RQLNLNNEWT LDKLRQLTK NAQDKLEHL FMLSGIPDTV FDLVELEV LK LELIPDVTIP
PSIAQLTGLK ELWLYHTAAK IEAPALAF LR ENLRALHIKF TDIKEIPLWI YSLKTLEELH
LTGNLSAENN RYIVIDGLRE LKRLKVLRLK SNLSKLPQVV TDVGVHLQKL SINNEGTKLI
VLNSLKKMAN LTELELIRCD LERIPHSIFS LHNLQEIDLK DNNLKTIEEI ISFQHLHRLT
CLKLWYNHIA YIPIQIGNLT NLERLYLNRN KIEKIPTQLF YCRKLRYLDL SHNNLTF LPA
DIGLLQNLQN LAITANRIET LPPELFQCRK LRALHLGNNV LQSLPSRVGE LTNLTQIELR
GNRLECLPVE LGECPLLKRS GLVVEEDLFN TLPPEVKERL WRADKEQA

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human LRRC8A Protein (raised in Insect Cells) purified by multi-step, protein-specific

Product Details

process to ensure crystallization grade.

- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: <ol style="list-style-type: none">1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	LRRC8A
Alternative Name:	LRRC8A (LRRC8A Products)

Target Details

Background: 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. The VRAC channel conducts iodide better than chloride and may also conduct organic osmolytes like taurine (PubMed:24725410, PubMed:24790029, PubMed:26530471, PubMed:26824658). LRRC8A and LRRC8D are required for the uptake of the drug cisplatin (PubMed:26530471). Required for in vivo channel activity, together with at least one other family member (LRRC8B, LRRC8C, LRRC8D or LRRC8E), channel characteristics depend on the precise subunit composition (PubMed:24790029, PubMed:26824658). Can form functional channels by itself (in vitro) (PubMed:26824658). Involved in B-cell development: required for the pro-B cell to pre-B cell transition (PubMed:14660746). Also required for T-cell development (By similarity). {ECO:0000250|UniProtKB:Q80WG5, ECO:0000269|PubMed:14660746, ECO:0000269|PubMed:24725410, ECO:0000269|PubMed:24790029, ECO:0000269|PubMed:26530471, ECO:0000269|PubMed:26824658}.

Molecular Weight: 55.4 kDa Including tag.

UniProt: [Q8IWT6](#)

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.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCl, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Handling

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)