antibodies.com

## Datasheet for ABIN3093623 LRRC8A Protein (AA 147-262) (His tag)



Overview	
Quantity:	1 mg
Target:	LRRC8A
Protein Characteristics:	AA 147-262
Origin:	Human
Source:	Escherichia coli (E. coli)
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:	PRTSSKLEHF VSILLKCFDS PWTTRALSET VVEESDPKPA FSKMNGSMDK KSSTVSEDVE
	ATVPMLQRTK SRIEQGIVDR SETGVLDKKE GEQAKALFEK VKKFRTHVEE GDIVYR
	Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a
	special request, please contact us.
Characteristics:	<ul> <li>Made in Germany - from design to production - by highly experienced protein experts.</li> <li>Human LRRC8A Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	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

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/3 | Product datasheet for ABIN3093623 | 04/30/2024 | Copyright antibodies-online. All rights reserved.

Product Details	
	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 receival 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 bacterial culture:
	<ol> <li>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.</li> </ol>
	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:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

## Target Details

Target:	LRRC8A
Alternative Name:	LRRC8A (LRRC8A Products)
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

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/3 | Product datasheet for ABIN3093623 | 04/30/2024 | Copyright antibodies-online. All rights reserved.

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
Application Details	
UniProt:	Q8IWT6
Molecular Weight:	14.1 kDa Including tag.
	ECO:0000269 PubMed:26530471, ECO:0000269 PubMed:26824658}.
	EC0:0000269 PubMed:24725410, EC0:0000269 PubMed:24790029,
	{EC0:0000250 UniProtKB:Q80WG5, EC0:0000269 PubMed:14660746,
	(PubMed:14660746). Also required for T-cell development (By similarity).
	Involved in B-cell development: required for the pro-B cell to pre-B cell transition
	PubMed:26824658). Can form functional channels by itself (in vitro) (PubMed:26824658).
	channel characteristics depend on the precise subunit composition (PubMed:24790029,
	together with at least one other family member (LRRC8B, LRRC8C, LRRC8D or LRRC8E),
	for the uptake of the drug cisplatin (PubMed:26530471). Required for in vivo channel activity,

as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee

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.

though.

Restrictions: For Research Use only

## Handling

Comment:

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
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)