

Datasheet for ABIN3136817

GLRA3 Protein (AA 34-464) (rho-1D4 tag)



Overview

Quantity:	1 mg	
Target:	GLRA3 (GLRa3)	
Protein Characteristics:	AA 34-464	
Origin:	Mouse	
Source:	Insect Cells	
Protein Type:	Recombinant	
Purification tag / Conjugate:	This GLRA3 protein is labelled with rho-1D4 tag.	
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)	

Product Details

Sequence:

ARSRSAPMSP SDFLDKLMGR TSGYDARIRP NFKGPPVNVT CNIFINSFGS IAETTMDYRV NIFLRQKWND PRLAYSEYPD DSLDLDPSML DSIWKPDLFF ANEKGANFHE VTTDNKLLRI FKNGNVLYSI RLTLTLSCPM DLKNFPMDVQ TCIMQLESFG YTMNDLIFEW QDEAPVQVAE GLTLPQFLLK EEKDLRYCTK HYNTGKFTCI EVRFHLERQM GYYLIQMYIP SLLIVILSWV SFWINMDAAP ARVALGITTV LTMTTQSSGS RASLPKVSYV KAIDIWMAVC LLFVFSALLE YAAVNFVSRQ HKELLRFRRK RKNKTEAFAL EKFYRFSDTD DEVRESRFSF TAYGMGPCLQ AKDGVVPKGP NHAVQVMPKS PDEMRKVFID RAKKIDTISR ACFPLAFLIF NIFYWVIYKI LRHEDIHQQQ D

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.
- Mouse Glra3 Protein (raised in Insect Cells) purified by multi-step, protein-specific 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 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:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

- 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
- 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
- Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. 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:	GLRA3 (GLRa3)		
Alternative Name:	Glra3 (GLRa3 Products)		
Background:	Glycine receptors are ligand-gated chloride channels. Channel opening is triggered by		
	extracellular glycine (PubMed:15131310, PubMed:20978350). Channel characteristics depend		
	on the subunit composition, heteropentameric channels display faster channel closure (By		
	similarity). Plays an important role in the down-regulation of neuronal excitability. Contributes to		
	the generation of inhibitory postsynaptic currents (PubMed:15131310). Contributes to		
	increased pain perception in response to increased prostaglandin E2 levels		
	(PubMed:15131310). Plays a role in the regulation of breathing rhytm, especially of the duration		
	of the postinspiratory phase (PubMed:20978350). Plays a role in cellular responses to ethanol		
	(By similarity). {ECO:0000250 UniProtKB:P24524, ECO:0000250 UniProtKB:Q91XP5,		
	ECO:0000269 PubMed:15131310, ECO:0000269 PubMed:20978350}.		
Molecular Weight:	51.1 kDa Including tag.		
UniProt:	Q91XP5		
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 gurantee		
	though.		
Comment:	Protein has not been tested for activity yet. 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:	options with you in detail to assure that you receive your protein of interest. For Research Use only		
Handling			
Restrictions: Handling Format: Buffer:	For Research Use only		
Handling Format:	For Research Use only Liquid		
Handling Format: Buffer:	For Research Use only Liquid 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.		
Handling Format: Buffer: Handling Advice:	For Research Use only Liquid 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer. Avoid repeated freeze-thaw cycles.		

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Expiry Date:

Unlimited (if stored properly)