

Datasheet for ABIN3113207

GLRA1 Protein (AA 29-457) (rho-1D4 tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	GLRA1
Protein Characteristics:	AA 29-457
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GLRA1 protein is labelled with rho-1D4 tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	ARSAPKPMSP SDFLDKLMGR TSGYDARIRP NFKGPPVNVN CNIFINSFGS IAETTM DYRV NIFLRQQWND PRLAYNEYPD DSLDLDP SML DSIWKPD LFF ANEKG AHFHE ITTDNKLLRI SRNGNVLYSI RITLT LACPM DLKNFPM DVQ TCIMQLESFG YTMNDLIFEW QEQGAVQVAD GLTLPQFILK EEKDLRYCTK HYNTGKFTCI EARFHLERQM GYYLIQMYIP SLLIVILSWI SFWINMDAAP ARVGLGITT V LTMTTQSSGS RASLPKVS YV KAIDIWMAVC LLFVFSALLE YAAVN FVSRQ HKELLRFRRK RRHHKSPMLN LFQEDEAGEG RFNF SAYGMG PACLQAKDGI SVKGANNSNT TNPPPAPSKS PEEMRKLFIQ RAKKIDKISR IGFPMAFLIF NMFYWIYKI VRREDVHNQ Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.
Characteristics:	<ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Human GLRA1 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 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:	<p>Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:</p> <ol style="list-style-type: none">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.3. 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:	GLRA1
Alternative Name:	GLRA1 (GLRA1 Products)
Background:	<p>Glycine receptors are ligand-gated chloride channels (PubMed:23994010, PubMed:25730860). Channel opening is triggered by extracellular glycine (PubMed:2155780, PubMed:7920629, PubMed:14551753, PubMed:16144831, PubMed:22715885, PubMed:22973015, PubMed:25973519, PubMed:9009272). Channel opening is also triggered by taurine and beta-alanine (PubMed:16144831, PubMed:9009272). Channel characteristics depend on the subunit composition, heteropentameric channels are activated by lower glycine levels and display faster desensitization (PubMed:14551753). Plays an important role in the down-regulation of neuronal excitability (PubMed:8298642, PubMed:9009272). Contributes to the generation of inhibitory postsynaptic currents (PubMed:25445488). Channel activity is potentiated by ethanol (PubMed:25973519). Potentiation of channel activity by intoxicating levels of ethanol contribute to the sedative effects of ethanol (By similarity). {ECO:0000250 UniProtKB:Q64018, ECO:0000269 PubMed:14551753, ECO:0000269 PubMed:16144831, ECO:0000269 PubMed:2155780, ECO:0000269 PubMed:22715885, ECO:0000269 PubMed:22973015, ECO:0000269 PubMed:23994010, ECO:0000269 PubMed:25445488, ECO:0000269 PubMed:25730860, ECO:0000269 PubMed:25973519, ECO:0000269 PubMed:7920629, ECO:0000269 PubMed:7925268, ECO:0000269 PubMed:9009272, ECO:0000305 PubMed:8298642}.</p>
Molecular Weight:	50.5 kDa Including tag.
UniProt:	P23415
Pathways:	Synaptic Membrane

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