

### Datasheet for ABIN3092331

# EPH Receptor A3 Protein (EPHA3) (AA 21-541) (His tag)



#### Overview

Quantity:	1 mg
Target:	EPH Receptor A3 (EPHA3)
Protein Characteristics:	AA 21-541
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EPH Receptor A3 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS), Crystallization (Crys)

### **Product Details**

Sequence:

ELIPQPSNEV NLLDSKTIQG ELGWISYPSH GWEEISGVDE HYTPIRTYQV CNVMDHSQNN WLRTNWVPRN SAQKIYVELK FTLRDCNSIP LVLGTCKETF NLYYMESDDD HGVKFREHQF TKIDTIAADE SFTQMDLGDR ILKLNTEIRE VGPVNKKGFY LAFQDVGACV ALVSVRVYFK KCPFTVKNLA MFPDTVPMDS QSLVEVRGSC VNNSKEEDPP RMYCSTEGEW LVPIGKCSCN AGYEERGFMC QACRPGFYKA LDGNMKCAKC PPHSSTQEDG SMNCRCENNY FRADKDPPSM ACTRPPSSPR NVISNINETS VILDWSWPLD TGGRKDVTFN IICKKCGWNI KQCEPCSPNV RFLPRQFGLT NTTVTVTDLL AHTNYTFEID AVNGVSELSS PPRQFAAVSI TTNQAAPSPV LTIKKDRTSR NSISLSWQEP EHPNGIILDY EVKYYEKQEQ ETSYTILRAR GTNVTISSLK PDTIYVFQIR ARTAAGYGTN SRKFEFETSP DSFSISGESS Q

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 EPHA3 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:

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

- 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.
- 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:

EPH Receptor A3 (EPHA3)

## Target Details

Alternative Name:	EPHA3 (EPHA3 Products)
Background:	Receptor tyrosine kinase which binds promiscuously membrane-bound ephrin family ligands
	residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring
	cells. The signaling pathway downstream of the receptor is referred to as forward signaling
	while the signaling pathway downstream of the ephrin ligand is referred to as reverse signaling
	Highly promiscuous for ephrin-A ligands it binds preferentially EFNA5. Upon activation by
	EFNA5 regulates cell-cell adhesion, cytoskeletal organization and cell migration. Plays a role in
	cardiac cells migration and differentiation and regulates the formation of the atrioventricular
	canal and septum during development probably through activation by EFNA1. Involved in the
	retinotectal mapping of neurons. May also control the segregation but not the guidance of
	motor and sensory axons during neuromuscular circuit development.
	{ECO:0000269 PubMed:11870224}.
Molecular Weight:	59.8 kDa Including tag.
UniProt:	P29320
Pathways:	RTK Signaling, Regulation of Cell Size
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:	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)