

Datasheet for ABIN3113329

## EPH Receptor A8 Protein (EPHA8) (AA 28-1005) (rho-1D4 tag)



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### Overview

|                               |  |
|-------------------------------|--|
| Quantity:                     | 1 mg   |
| Target:                       | EPH Receptor A8 (EPHA8)  |
| Protein Characteristics:      | AA 28-1005   |
| Origin:                       | Human  |
| Source:                       | Insect Cells   |
| Protein Type:                 | Recombinant  |
| Purification tag / Conjugate: | This EPH Receptor A8 protein is labelled with rho-1D4 tag.           |
| Application:                  | Western Blotting (WB), ELISA, Crystallization (Crys), SDS-PAGE (SDS) |

### Product Details

|           |  |
|-----------|--|
| Sequence: | <p>ARGEVNLLDT STIHGDWGWL TYPAHGWDSI NEVDESFPQI HTYQVCNVMS PNQNNWLRTS</p> <p>WVPRDGARRV YAEIKFTLRD CNSMPGVLTG CKETFNLYYL ESDRDLGAST QESQFLKIDT</p> <p>IAADESFTGA DLGVRRLLKN TEVRSVGPLS KRGFYLAQD IGACLAISL RIYYKKCPAM</p> <p>VRNLAAFSEA VTGADSSSLV EVRGQCVRHS EERDTPKMYC SAEGEWLVPI GKCVCSAGYE</p> <p>ERRDACVACE LGFYKSAPGD QLCARCPPHS HSAAPAAQAC HCDLSYYRAA LDPPSSACTR</p> <p>PPSAPVNLIS SVNGTSVTLE WAPPLDPGGR SDITYNAVCR RCPWALSRC EACSGSTRFVP</p> <p>QQTSLVQASL LVANLLAHMN YSFWIEAVNG VSDLSPEPRR AAVVNITTNQ AAPSQVVVIR</p> <p>QERAGQTSVS LLWQEPEQPN GIILEYEIKY YEKDKEMQSY STLKAVTTRA TVSGLKPGTR</p> <p>YVFQVRARTS AGCGRFSQAM EVETGKPRPR YDTRTIVWIC LTLITGLVL LLLICKKRH</p> <p>CGYSKAFQDS DEEKMHYQNG QAPPPVFLPL HPPGKLPEP QFYAEPHTYE EPGRAGRSFT</p> <p>REIEASRIHI EKIIGSGDSG EVCYGRRLRP GQRDVPVAIK ALKAGYTERQ RRDFLSEASI</p> <p>MGQFDHPNII RLEGVVTRGR LAMIVTEYME NGSLDTFLRT HDGQFTIMQL VGMLRGVGAG</p> |
|-----------|--|

MRYLSDLGYV HRDLAARNVL VDSNLVCKVS DFGLSRVLED DPDAAYTTTG GKIPIRWTAP  
EAIAFRTFSS ASDVWSFGVV MWEVLAYGER PYWNMTNRDV ISSVEEGYRL PAPMGCPHAL  
HQLMLDCWHK DRAQRPRFSQ IVSVLDALIR SPESLRATAT VSRCPPPAFV RSCFDLRGGS  
GGGGGLTVGD WLDSIRMGRY RDHFAAGGYS SLGMVLRMNA QDVRALGITL MGHQKKILGS  
IQTMRAQLTS TQGPRRHL

**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 EPHA8 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:

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.
3. Protein containing fractions of the best purification are subjected to second purification step

## Product Details

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:           | EPH Receptor A8 (EPHA8)   |
| Alternative Name: | EPHA8 ( <a href="#">EPHA8 Products</a> )  |
| Background:       | <p>Receptor tyrosine kinase which binds promiscuously GPI-anchored ephrin-A 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. The GPI-anchored ephrin-A EFNA2, EFNA3, and EFNA5 are able to activate EPHA8 through phosphorylation. With EFNA5 may regulate integrin-mediated cell adhesion and migration on fibronectin substrate but also neurite outgrowth. During development of the nervous system plays also a role in axon guidance. Downstream effectors of the EPHA8 signaling pathway include FYN which promotes cell adhesion upon activation by EPHA8 and the MAP kinases in the stimulation of neurite outgrowth (By similarity). {ECO:0000250}.</p> |
| Molecular Weight: | 109.6 kDa Including tag.  |
| UniProt:          | <a href="#">P29322</a>  |
| Pathways:         | <a href="#">RTK Signaling</a>   |

## 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 |

Application Details

|               |                                   |
|---------------|-----------------------------------|
|               | 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)   |