

Datasheet for ABIN3092450

EPHA1 Protein (AA 26-547) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	EPHA1
Protein Characteristics:	AA 26-547
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EPHA1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence: KEVTLMDSK AQGELGWLLD PPKDGWSEQQ QILNGTPLYM YQDCPMQGRD DTDHWLRSNW
IYRGEEASRV HVELQFTVRD CKSFPGGAGP LGCKETFNLL YMESDQDVGI QLRRPLFQKV
TTVAADQSFT IRDLVSGSVK LNVERCSLGR LTRRGLYLAF HNPACVALV SVRVFYQRCP
ETLNGLAQFP DTLPGPAGLV EVAGTCLPHA RASPRPSGAP RMHCSPDGEW LVPVGRCHCE
PGYEEGSGE ACVACPSGSY RMDMDTPHCL TCPQQSTAES EGATICTCES GHYRAPGEGP
QVACTGPPSA PRNLSFSASG TQLSLRWEPP ADTGGQRQDVR YSVRCSQCQG TAQDGGPCQP
CGVGVFHSPG ARGLTTPAVH VNGLEPYANY TFNVEAQNGV SGLGSSGHAS TSVSISMCHA
ESLSGLSLRL VKKEPRQLEL TWAGSRPRSP GANLTYELHV LNQDEERYQM VLEPRVLLTE
LQPDTTYIVR VRMLTPLGPG PFSPDHEFRT SPPVSRGLTG GE

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Product Details

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
 - Human EPHA1 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:
- 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.
 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: Protein is endotoxin free.

Grade: Crystallography grade

Target Details

Target:	EPHA1
Alternative Name:	EPHA1 (EPHA1 Products)
Background:	Receptor tyrosine kinase which binds promiscuously membrane-bound 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. Binds with a low affinity EFNA3 and EFNA4 and with a high affinity to EFNA1 which most probably constitutes its cognate/functional ligand. Upon activation by EFNA1 induces cell attachment to the extracellular matrix inhibiting cell spreading and motility through regulation of ILK and downstream RHOA and RAC. Plays also a role in angiogenesis and regulates cell proliferation. May play a role in apoptosis. {ECO:0000269 PubMed:17634955, ECO:0000269 PubMed:19118217, ECO:0000269 PubMed:20043122}.
Molecular Weight:	57.5 kDa Including tag.
UniProt:	P21709

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.

Handling

Expiry Date: Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process