

Datasheet for ABIN3094714

Plexin A4 Protein (PLXNA4) (AA 24-1237) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	Plexin A4 (PLXNA4)
Protein Characteristics:	AA 24-1237
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Plexin A4 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Crystallization (Crys), ELISA, Western Blotting (WB)

Product Details

Sequence:	<p>TLLTRQPAPL SQKQRSFVTF RGEPAEGFNH LVVDERTGHI YLGAVNRIYK LSSDLKVLVT</p> <p>HETGPDEDNP KCYPPIVQT CNEPLTTTNN VNKMLLDYK ENRLIACGSL YQGICKLLRL</p> <p>EDLFLGEPY HKKEHYLSGV NESGSVFGVI VSYSNLDDKL FIATAVDGKP EYFPTISSRK</p> <p>LTKNSEADGM FAYVFHDEFV ASMIKIPSDT FTIIPDFDIY VYVGFSNGF VYFLTLPQEM</p> <p>VSPPGSTTKE QVYTSKLVRL CKEDTAFNSY VEVPIGCERS GVEYRLLQAA YLSKAGAVLG</p> <p>RTLGVHPDDD LLFTVFSKGQ KRKMKSLEDES ALCIFILKQI NDRIKERLQS CYRGEGTLDL</p> <p>AWLKVKDIPC SSALLTIDN FCGLDMNAPL GVSDMVRGIP VFTEDRDRMT SVIAYVYKNH</p> <p>SLAFVGTKSG KKKIRVDGP RGNALQYETV QVVDPGPVL RDMAFSKDHEQ LYIMSERQLT</p> <p>RVPVESCQY QSCGECGSG DPHCGWCVLH NTCTRKERCE RSKEPRRFAS EMKQCVRILT</p> <p>HPNNISVSQY NVLLVLETYN VPESLGVNC TFEDLSEMDG LVVGNQIQCY SPAAKEVPRI</p> <p>ITENGDDHVV QLQLKSKETG MTFASFSVF YNCSVHNSCL SCVESPYRCH WCKYRHVCTH</p> <p>DPKTCSEFQEG RVKLPEDCPQ LLRVDKILVP VEVIPITLK AKNLPQPQSG QRGYECILNI</p>
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QGSEQRVPAL RFNSSSVQCQ NTSYSYEGME INNLPVELTV VWNHGFNIDN PAQNKVHLYK
CGAMRESCGL CLKADPDFAC GWCQGPQGCT LRQHCPAQES QWLELSGAKS KCTNPRITEI
IPVTGPREGG TKVTIRGENL GLEFRDIASH VKVAGVECSP LVDGYIPAEQ IVCEMGEAKP
SQHAGFVEIC VAVCRPEFMA RSSQLYYFMT LTLSDLKPSR GPMSGGTQVT ITGTNLNAGS
NVVVMFGKQP CLFHRRSPSY IVCNTTSSDE VLEMKVSVQV DRAKIHQDLV FQYVEDPTIV
RIEPEWSIVS GNTPIAVWGT HLDLIQNPQI RAKHGGKEHI NICEVLNATE MTCQAPALAL
GPDHQSDLTE RPEEFGFILD NVQSLILNK TNFTYYPNPV FEAFGPSGIL ELKPGTPIIL
KGKNLIPPVA GGNVKLNYTV LVGEKPCTVT VSDVQLLCES PNLIGRHKVM ARVGGMEYSP
GMVYIAPDSP LSLP

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 PLXNA4 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

Product Details

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: Plexin A4 (PLXNA4)

Alternative Name: PLXNA4 ([PLXNA4 Products](#))

Background: Coreceptor for SEMA3A. Necessary for signaling by class 3 semaphorins and subsequent remodeling of the cytoskeleton. Plays a role in axon guidance in the developing nervous system. Class 3 semaphorins bind to a complex composed of a neuropilin and a plexin. The plexin modulates the affinity of the complex for specific semaphorins, and its cytoplasmic domain is required for the activation of down-stream signaling events in the cytoplasm (By similarity). {ECO:0000250}.

Molecular Weight: 136.0 kDa Including tag.

UniProt: [Q9HCM2](#)

Pathways: [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 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)

Images



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