

Datasheet for ABIN3094645

## Plexin A3 Protein (PLXNA3) (AA 20-1220) (His tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	Plexin A3 (PLXNA3)
Protein Characteristics:	AA 20-1220
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Plexin A3 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

#### Product Details

Sequence:	<p>NRPFRAFVVT DTTLTHLAVH RVTGEVFGA VNRVFKLAPN LTELRAHVTG PVEDNARCYP</p> <p>PPSMRVCAHR LAPVDNINKL LLIDYAARRL VACGSIWQGI CQFLRLDDLF KLGEPHHRKE</p> <p>HYLSGAQEPD SMAGVIVEQG QGPSKLFVGT AVDGKSEYFP TLSSRKLISD EDSADMFSLV</p> <p>YQDEFVSSQI KIPSDTSLY PAFDIYYIYG FVSASFVYFL TLQLDTQQT LDTAGEKFFT</p> <p>SKIVRMCAGD SEFYSYVEFP IGCSWRGVEY RLVQSAHLAK PGLLLAQUALG VPADEDVLFT</p> <p>IFSQGQKNRA SPPRQTILCL FTLSNINAH IRRRIQSCYRG EGTALPWLL NKELPCINTP</p> <p>MQINGNFCGL VLNQPLGGLH VIEGLPLLAD STDGMASVAA YTYRQHSVVF IGTRSGSLKK</p> <p>VRVDGFQDAH LYETVPVVDG SPILRDLLFS PDHRHIYLLS EKQVSQLPVE TCEQYQSCAA</p> <p>CLGSGDPHCG WCVLRHRCCR EGACLGASAP HGFAEELSKC VQVRVRPNNV SVTSPGVQLT</p> <p>VTLHNVPDLS AGVSCAFEEA AENEAVLLPS GELLCPSPSL QELRALTRGH GATRTRVRLQL</p> <p>LSKETGVRFA GADVFVYNCS VLQSCMSCVG SPYPCHWCKY RHTCTSRPHE CSFQEGRVHS</p> <p>PEGCPEILPS GDLLIPVGVM QPLTLRAKNL PQPQSGQKNY ECVVRVQGRQ QRVPAVRFNS</p>
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SSVQCQNASY SYEGDEHGDT ELDFSVVWDG DFPIDKPPSF RALLYKCWAQ RPSCGLCLKA  
DPRFNCGWCI SEHRCQLRTH CPAPKTNWMH LSQKGTRCSH PRITQIHPLV GPKEGGTRVT  
IVGDNLGLLS REVGLRVAGV RCNSIPAEYI SAERIVCEME ESLVSPPPPG PVELCVGDSC  
ADFRTQSEQV YSFVTPTFDQ VSPSRGPASG GTRLTISGSS LDAGSRVTVT VRDSECQFVR  
RDAKAIVCIS PLSTLGPSQA PITLAIDRAN ISSPGLIYTY TQDPTVTRLE PTWSIINGST AITVSGTHLL  
TVQEPRVRAK YRGIETTNTC QVINDTAMLC KAPGIFLGRP QPRAQGEHPD EFGFLLDHVQ  
TARSLNRSSF TYYPDPSFEP LGPSGVLDVK PGSHVVLK GK NLIPAAAGSS RLNYTVLIGG  
QPCSLTVSDT QLLCDSPSQT GRQPVMVLVG GLEFWLGLTH ISAERALTLP A

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

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human PLXNA3 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.

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### 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.

## Product Details

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 A3 (PLXNA3)

Alternative Name: PLXNA3 ([PLXNA3 Products](#))

Background: Coreceptor for SEMA3A and SEMA3F. Necessary for signaling by class 3 semaphorins and subsequent remodeling of the cytoskeleton. Plays a role in axon guidance in the developing nervous system. Regulates the migration of sympathetic neurons, but not of neural crest precursors. Required for normal dendrite spine morphology in pyramidal neurons. May play a role in regulating semaphorin-mediated programmed cell death 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.

Molecular Weight: 132.4 kDa Including tag.

UniProt: [P51805](#)

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.

## Application Details

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