

Datasheet for ABIN3094715

Plexin B2 Protein (PLXNB2) (AA 20-1197) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Plexin B2 (PLXNB2)
Protein Characteristics:	AA 20-1197
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Plexin B2 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	LRPRKLDFFR SEKELNHLAV DEASGVVYLG AVNALYQLDA KLQLEQQVAT GPALDNKKCT PPIEASQCHE AEMTDNVNQL LLLDPPRKRL VECGSLFKGI CALRALSNI LRLFYEDGSG EKSFVASNDE GVATVGLVSS TGPGGDRVLF VGKGNPHDN GIIVSTRLLD RTDSREAFEA YTDHATYKAG YLSTNTQQFV AAFEDGPYVF FVFNQDKHP ARNRTLLARM CREDPNYYSY LEMDLQCRDP DIHAAAFGTC LAASVAAPGS GRVLYAVFSR DSRSSGGPGA GLCLFPLDKV HAKMEANRNA CYTGTREARD IFYKPFHGD I QCGGHAPGSS KSFPCGSEHL PYPLGSRDGL RGTA VLQRGG LNLTA VTVA A ENNHTVA FLG TSDGRILKVY LTPDGT SSEY DSILVEINKR VKRDLVLSGD LGS LYAMTQD KVFRLPVQEC LSYPTCTQCR DSQDPYCGWC VVEGRCTRKA ECPRAEEASH WLWSRSKSCV AVTSAQPQNM SRR AQEVQL TVSPLPALSE EDELLCLFGE SPPHPARVEG EAVICNSPSS IPVTPPGQDH VAVTIQ LLLR RGNIFLTSYQ YPFYDCRQAM SLEENLPCIS CVSNRWTCQW DLRYHECREA SPNPEDGIVR AHMEDSCPQF LGPSPLVIPM NHETDVNFQG KNLDTVKGSS LHVGS DLLKF MEPVTMQESG TFAFRTPKLS HDANETLPLH
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LYVKS YGKNI DSKLHVTLYN CSFGRSDCSL CRAANPDYRC AWCGGQSRCV YEALCNTTSE
CPPPVITRIQ PETGPLGGGI RITILGSNLG VQAGDIQRIS VAGRNC SFQP ERYSVSTRIV
CVIEAAETPF TGGVEVDVFG KLGRSPPNVQ FTFQQPKPLS VEPQQGPQAG GTTLTIHGTH
LDTGSQEDVR VTLNGVPCKV TKFGAQLQCV TGPQATRGQM LLEVS YGGSP VPNPGIFFTY
RENVLRAFE PLRSFASGGR SINVTGQGFS LIQRFAMVVI AEPLQSWQPP REAESLQPMT
VVGTDYVFHN DTKVVFLSPA VPPEPEAYNL TVLIEMDGHR ALLRTEAGAF EYVPDPTFEN
FTGGVKKQVN KLIHARGTNL NKAMTLQEA AFVGAERCTM KTLTETDLYC EPPEVQPPPK
RRQKRDTTHN LPEFIVKFGS REWVLGRVEY DTRVSDVP

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 PLXNB2 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.

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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 B2 (PLXNB2)

Alternative Name: PLXNB2 ([PLXNB2 Products](#))

Background: Cell surface receptor for SEMA4C, SEMA4D and SEMA4G that plays an important role in cell-cell signaling. Binding to class 4 semaphorins promotes downstream activation of RHOA and phosphorylation of ERBB2 at 'Tyr-1248'. Required for normal differentiation and migration of neuronal cells during brain corticogenesis and for normal embryonic brain development. Regulates the migration of cerebellar granule cells in the developing brain. Plays a role in RHOA activation and subsequent changes of the actin cytoskeleton. Plays a role in axon guidance, invasive growth and cell migration. May modulate the activity of RAC1 and CDC42. Down-regulates macrophage migration in wound-healing assays (in vitro) (By similarity). {ECO:0000250, ECO:0000269|PubMed:12183458, ECO:0000269|PubMed:12533544, ECO:0000269|PubMed:15184888}.

Molecular Weight: 130.3 kDa Including tag.

UniProt: [O15031](#)

Pathways: [Tube Formation](#)

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

Application Details

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