

Datasheet for ABIN3131040

Plexin B2 Protein (PLXNB2) (AA 20-1201) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	1 mg
Target:	Plexin B2 (PLXNB2)
Protein Characteristics:	AA 20-1201
Origin:	Mouse
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:	LRSRKPESFR SETELNHLAV DEVTGVVYVG AVNALYQLSA DLHVQQHVVT GPFMDNKKCT PPIEASQCHE AVLTDNFNQL LLLDPPGKRL VECGSLFKGI CALRAMSNIS VRLFYEDGSG EKSFVASNDE RVATVGLVTS TRPDGERVLF VGKNGNPHDN GIVSTRLLD RAEGREAFEA YSDHTTFKAG YLSTNTQQFV AAFEDDFYVF FVFNHQDKHP AKNRTLLARM CKDDPSYYSY VEMDLQCQDP SDPQDSAFGT CLAASVATSG AGRALYAVFS RDGRSTGGPG AGLCVFPLDK VREKIEANRN ACYTGAREAG RTIFYKPFHG EIQC GGHLIG ASESFPCGSE HLPYPLGSRD GLVATAVLHR GGLNLTAVTV TAENDHTVAF LGTSDGRILK VYLAPDGTSA EYGSIPVDIN KKIKQDLALS GNLSSLYAMT QDKVFRLPVQ ECLSYVTCAQ CRDSQDPYCG WCIEGRCTR KSECSRAEET GHWLWSREKS CVAITDAFPQ NMSRRAQGEV RLSVSPLPTL TEDDELLCLF GDSPPHPARV EDDTVICNSP SSIPSTPPGQ DHVDVSIQLL LKSGSVFLTS HQYPFYDCRE AMSLVENLPC ISCASNRWTC QWDLQYYECR EASPNPEEGI IRAHMEDNCP QFLAPDPLVI PMNHETEVT FQGKNLETVKV SSVYVGSELL NFEETVTMHE SDTFSFRTPK LSHDGNETLP
-----------	---

LHLYVKSFGK NIDSKLQVTL YNCSFGRSDC SLCLAADPAY RCVWCRGQNR CVYEALCSNV
TSECPPPVIT RIQPETGPLG GGILVTIHGS NLGVKADDDK KITVAGQNCA FEPRGYSVST
RIVCAIEASE MPFTGGIEVD VNGKLGHSPV HVQFTYQQPQ PLSVEPRQGP QAGGTTLTIN
GTHLDTGSKE DVRVTLNDVP CEVTKFGAQL QCVTGQQLAP GQVTEIYYG GSRVPSPGIS
FTYCENPMIR AFEPLRSFVS GGRSINVTGQ GFSLIQKFAM VVIAEPLRSW RRRRREAGAL
ERVTVEGMEY VFYNDTKVVF LSPAVPEEPE AYNLTVLIRM DGHCAPLRTE AGVFEYVADP
TFENFTGGVK KQVNKLIHAR GTNLNKAMTL EEAEAFVGAE RCIMKTLTET DLYCEPPEVQ
PPPKRRQKRD TAHNLPEFIV KFGSREWVLG RVEYDTRASD VP

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.
- Mouse Plxn2 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.

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 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).
{ECO:0000269|PubMed:17554007, ECO:0000269|PubMed:19948886, ECO:0000269|PubMed:21122816, ECO:0000269|PubMed:21966369}.

Molecular Weight: 131.1 kDa Including tag.

UniProt: [B2RXS4](#)

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: Protein has not been tested for activity yet. 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

Application Details

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