Datasheet for ABIN3095853

Tenascin R Protein (AA 32-1358) (His tag)

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Overview

Quantity:	1 mg
Target:	Tenascin R (TNR)
Protein Characteristics:	AA 32-1358
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Tenascin R protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	QLEVTTERVQ RQSVEEEGGI ANYNTSSKEQ PVVFNHVYNI NVPLDNLCSS GLEASAEQEV SAEDETLAEY MGQTSDHESQ VTFTHRINFP KKACPCASSA QVLQELLSRI EMLEREVSVL RDQCNANCCQ ESAATGQLDY IPHCSGHGNF SFESCGCICN EGWFGKNCSE PYCPLGCSSR GVCVDGQCIC DSEYSGDDCS ELRCPTDCSS RGLCVDGECV CEEPYTGEDC RELRCPGDCS GKGRCANGTC LCEEGYVGED CGQRQCLNAC SGRGQCEEGL CVCEEGYQGP DCSAVAPPED LRVAGISDRS IELEWDGPMA VTEYVISYQP TALGGLQLQQ RVPGDWSGVT ITELEPGLTY NISVYAVISN ILSLPITAKV ATHLSTPQGL QFKTITETTV EVQWEPFSFS FDGWEISFIP KNNEGGVIAQ VPSDVTSFNQ TGLKPGEEYI VNVVALKEQA RSPPTSASVS TVIDGPTQIL VRDVSDTVAF VEWIPPRAKV DFILLKYGLV GGEGGRTTFR LQPPLSQYSV QALRPGSRYE VSVSAVRGTN ESDSATTQFT TEIDAPKNLR VGSRTATSLD LEWDNSEAEV QEYKVVYSTL AGEQYHEVLV PRGIGPTTRA TLTDLVPGTE YGVGISAVMN SQQSVPATMN ARTELDSPRD LMVTASSETS ISLIWTKASG PIDHYRITFT PSSGIASEVT VPKDRTSYTL TDLEPGAEYI

ISVTAERGRQ QSLESTVDAF TGFRPISHLH FSHVTSSSVN ITWSDPSPPA DRLILNYSPR DEEEEMMEVS LDATKRHAVL MGLQPATEYI VNLVAVHGTV TSEPIVGSIT TGIDPPKDIT ISNVTKDSVM VSWSPPVASF DYYRVSYRPT QVGRLDSSVV PNTVTEFTIT RLNPATEYEI SLNSVRGREE SERICTLVHT AMDNPVDLIA TNITPTEALL QWKAPVGEVE NYVIVLTHFA VAGETILVDG VSEEFRLVDL LPSTHYTATM YATNGPLTSG TISTNFSTLL DPPANLTASE VTRQSALISW QPPRAEIENY VLTYKSTDGS RKELIVDAED TWIRLEGLLE NTDYTVLLQA AQDTTWSSIT STAFTTGGRV FPHPQDCAQH LMNGDTLSGV YPIFLNGELS QKLQVYCDMT TDGGGWIVFQ RRQNGQTDFF RKWADYRVGF GNVEDEFWLG LDNIHRITSQ GRYELRVDMR DGQEAAFASY DRFSVEDSRN LYKLRIGSYN GTAGDSLSYH QGRPFSTEDR DNDVAVTNCA MSYKGAWWYK NCHRTNLNGK YGESRHSQGI NWYHWKGHEF SIPFVEMKMR PYNHRLMAGR KRQSLQF

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 TNR 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 receival 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:

Product Details

	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:	Tenascin R (TNR)
Alternative Name:	TNR (TNR Products)
Background:	Neural extracellular matrix (ECM) protein involved in interactions with different cells and matrix components. These interactions can influence cellular behavior by either evoking a stable adhesion and differentiation, or repulsion and inhibition of neurite growth. Binding to cell surface gangliosides inhibits RGD-dependent integrin-mediated cell adhesion and results in an inhibition of PTK2/FAK1 (FAK) phosphorylation and cell detachment. Binding to membrane surface sulfatides results in a oligodendrocyte adhesion and differentiation. Interaction with CNTN1 induces a repulsion of neurons and an inhibition of neurite outgrowth. Interacts with SCN2B may play a crucial role in clustering and regulation of activity of sodium channels at nodes of Ranvier. TNR-linked chondroitin sulfate glycosaminoglycans are involved in the interaction with FN1 and mediate inhibition of cell adhesion and neurite outgrowth. The highly regulated addition of sulfated carbohydrate structure may modulate the adhesive properties of TNR over the course of development and during synapse maintenance (By similarity). {ECO:0000250}.
Molecular Weight:	147.3 kDa Including tag.
UniProt:	Q92752
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 gurantee 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)

