Datasheet for ABIN3076753

SCN1B Protein (AA 19-160) (MBP tag,His tag)

2 Images

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Overview

Quantity:	1 mg
Target:	SCN1B
Protein Characteristics:	AA 19-160
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SCN1B protein is labelled with MBP tag,His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MKTEEGKLVI WINGDKGYNG LAEVGKKFEK DTGIKVTVEH PDKLEEKFPQ VAATGDGPDI IFWAHDRFGG YAQSGLLAEI TPDKAFQDKL YPFTWDAVRY NGKLIAYPIA VEALSLIYNK DLLPNPPKTW EEIPALDKEL KAKGKSALMF NLQEPYFTWP LIAADGGYAF KYENGKYDIK DVGVDNAGAK AGLTFLVDLI KNKHMNADTD YSIAEAAFNK GETAMTINGP WAWSNIDTSK VNYGVTVLPT FKGQPSKPFV GVLSAGINAA SPNKELAKEF LENYLLTDEG LEAVNKDKPL GAVALKSYEE ELAKDPRIAA TMENAQKGEI MPNIPQMSAF WYAVRTAVIN AASGRQTVDE ALKDAQTGGG SGGGSENLYF QSAAAGGCVE VDSDTEAVYG MTFKILCISC KRRSETTAET FTEWTFRQKG TEEFVKILRY ENEVLQLEED ERFEGRVVWN GSRGTKDLQD LSIFITNVTY NHSGDYECHV YRLLFFDNYE HNTSVVKKIH LEVVDKANRD MASIVSEGSS GHHHHHH
Specificity:	N-terminal MBP-tag, C-terminal His-tag
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts.

Product Details

	• Human SCN1B Protein (raised in E. Coli) purified by multi-step, protein-specific process to ensure crystallization grade. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This made-to-order protein has already been successfully produced. Please let us know if you are interested in purchasing a smaller amount of this protein. We will check our stock and make you a customized quote in case we can provide this protein in a smaller amount.. 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 bacterial culture: 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:	Endotoxin has not been removed. Please contact us if you require endotoxin removal.
Grade:	Crystallography grade

Target Details

Target:	SCN1B
Alternative Name:	SCN1B (SCN1B Products)
Background:	Crucial in the assembly, expression, and functional modulation of the heterotrimeric complex of the sodium channel. The subunit beta-1 can modulate multiple alpha subunit isoforms from brain, skeletal muscle, and heart. Its association with neurofascin may target the sodium channels to the nodes of Ranvier of developing axons and retain these channels at the nodes in

Target Details

	mature myelinated axons. {ECO:0000269|PubMed:14622265}., Isoform 2: Cell adhesion molecule that plays a critical role in neuronal migration and pathfinding during brain development. Stimulates neurite outgrowth. {ECO:0000269|PubMed:14622265}.
Molecular Weight:	17.5 kDa Including tag.
UniProt:	Q07699

Application Details

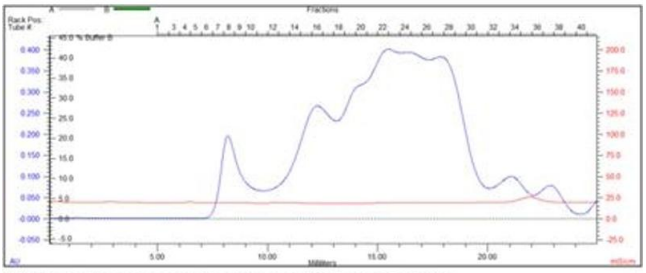
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with 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:	50 mM Tris pH 7.4, 150 mM NaCl
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Size-exclusion chromatography-High Pressure Liquid Chromatography

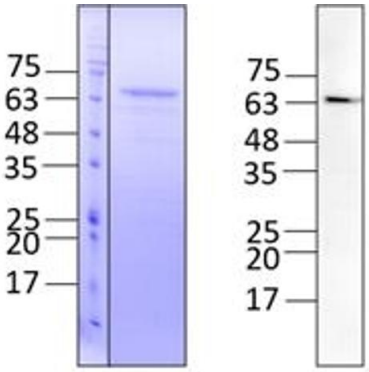
Image 1.



SCN1B (Sodium Channel, Voltage-Gated, Type I, beta (SCN1B)| Q07699 |19-160, gel filtration, Superdex 200 fractions 13-16

Western Blotting

Image 2.



Sodium Channel, Voltage-Gated, Type I, beta (SCN1B)| Q07699 |19-160, gel filtration, Superdex 200 fractions 13-16