

Datasheet for ABIN3137529

Sorting Nexin 1 Protein (SNX1) (AA 1-522) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	Sorting Nexin 1 (SNX1)
Protein Characteristics:	AA 1-522
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Sorting Nexin 1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence: MASGGGGCSA SERLPPFFPG MDPESEGAAG ASEPEAGDSD TEGEDIFTGA AAATKPQSPK
KTTSLFPIKN GSKENGIHED QDQEPQLFA DATVELSLDS TQNNQKTMPG KTLTSHSPQE
ATNSPKPQPS YEELEEEEQE DQFDLTVGIT DPEKIGDGMN AYWVAYKVTTQ TSLPMFRSRQ
FAVKRRFSDF LGLYEKLSEK HSQNGFIVPP PPEKSLIGMT KVKVGKEDSS SAEFLEKRRR
ALERYLQRIV NHPTMLQDPD VREFLEKEEL PRAVGTQALS GAGLLKMFNK ATDAVSKMTI
KMNESDIWFE EKLQVEVECEE QRLRKLHAVV ETLVNHREL ALNTALFAKS LAMLGSSDN
TALSRALSQ L AEVEEKIEQL HQEQANNSF LLAELLSYI RLLAIVRAAF DQRMKTWQRW
QDAQATLQKK RESEARLLWA NKPKLQQAQ DEITWESRV TQYERDFERI STVVRKEVTR
FEKEKSKDFK NHVMKYLET L LHSQQQLAKY WEAFLPEAKA IS

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

Product Details

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Snx1 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 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 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: Sorting Nexin 1 (SNX1)

Alternative Name: Snx1 ([SNX1 Products](#))

Background: Involved in several stages of intracellular trafficking. Interacts with membranes containing phosphatidylinositol 3-phosphate (PtdIns(3P)) or phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2). Acts in part as component of the retromer membrane-deforming SNX-BAR subcomplex. The SNX-BAR retromer mediates retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN) and is involved in endosome-to-plasma membrane transport for cargo protein recycling. The SNX-BAR subcomplex functions to deform the donor membrane into a tubular profile called endosome-to-TGN transport carrier (ETC). Can sense membrane curvature and has in vitro vesicle-to-membrane remodeling activity. Involved in retrograde endosome-to-TGN transport of lysosomal enzyme receptors (IGF2R, M6PR and SORT1). Plays a role in targeting ligand-activated EGFR to the lysosomes for degradation after endocytosis from the cell surface and release from the Golgi. Involvement in retromer-independent endocytic trafficking of P2RY1 and lysosomal degradation of protease-activated receptor-1/F2R. Promotes KALRN- and RHOG-dependent but retromer-independent membrane remodeling such as lamellipodium formation, the function is dependent on GEF activity of KALRN. Required for endocytosis of DRD5 upon agonist stimulation but not for basal receptor trafficking (By similarity). {ECO:0000250|UniProtKB:Q13596}.

Molecular Weight: 59.9 kDa Including tag.

UniProt: [Q9WV80](#)

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 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

Handling

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