

## Datasheet for ABIN7555541

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



## Overview

Quantity:	1 mg
Target:	Sorting Nexin 1 (SNX1)
Protein Characteristics:	AA 1-522
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Sorting Nexin 1 protein is labelled with His tag.

## **Product Details**

Froduct Details	
Purpose:	Custom-made recombinant SNX1 Protein expressed in mammalian cells.
Sequence:	MASGGGCSA SERLPPPFPG LEPESEGAAG GSEPEAGDSD TEGEDIFTGA AVVSKHQSPK
	ITTSLLPINN GSKENGIHEE QDQEPQDLFA DATVELSLDS TQNNQKKVLA KTLISLPPQE
	ATNSSKPQPT YEELEEEEQE DQFDLTVGIT DPEKIGDGMN AYVAYKVTTQ TSLPLFRSKQ
	FAVKRRFSDF LGLYEKLSEK HSQNGFIVPP PPEKSLIGMT KVKVGKEDSS SAEFLEKRRA
	ALERYLQRIV NHPTMLQDPD VREFLEKEEL PRAVGTQTLS GAGLLKMFNK ATDAVSKMTI
	KMNESDIWFE EKLQEVECEE QRLRKLHAVV ETLVNHRKEL ALNTAQFAKS LAMLGSSEDN
	TALSRALSQL AEVEEKIEQL HQEQANNDFF LLAELLSDYI RLLAIVRAAF DQRMKTWQRW
	QDAQATLQKK REAEARLLWA NKPDKLQQAK DEILEWESRV TQYERDFERI STVVRKEVIR
	FEKEKSKDFK NHVIKYLETL LYSQQQLAKY WEAFLPEAKA IS Sequence without tag. The
	proposed Purification-Tag is based on experiences with the expression system, a different
	complexity of the protein could make another tag necessary. In case you have a special
	request, please contact us.

#### **Product Details**

# Specificity: If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer. Characteristics: Key Benefits: · Made to order protein - from design to production - by highly experienced protein experts. · Protein expressed in mammalian cells and purified in one-step affinity chromatography · The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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 try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. 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. Purity: > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC) Grade: custom-made **Target Details** Target: Sorting Nexin 1 (SNX1) Alternative Name: SNX1 (SNX1 Products) Background: Sorting nexin-1, FUNCTION: 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) (PubMed:12198132). 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-

vesicle-to-membrane remodeling activity (PubMed:19816406, PubMed:23085988). Involved in

SORT1) and Shiginella dysenteria toxin stxB. Plays a role in targeting ligand-activated EGFR to

to-TGN transport carrier (ETC) (Probable). Can sense membrane curvature and has in vitro

retrograde endosome-to-TGN transport of lysosomal enzyme receptors (IGF2R, M6PR and

the lysosomes for degradation after endocytosis from the cell surface and release from the Golgi (PubMed:12198132, PubMed:15498486, PubMed:17550970, PubMed:17101778, PubMed:18088323, PubMed:21040701). Involvement in retromer-independent endocytic trafficking of P2RY1 and lysosomal degradation of protease-activated receptor-1/F2R (PubMed:16407403, PubMed:20070609). Promotes KALRN- and RHOG-dependent but retromer-independent membrane remodeling such as lamellipodium formation, the function is dependent on GEF activity of KALRN (PubMed:20604901). Required for endocytosis of DRD5 upon agonist stimulation but not for basal receptor trafficking (PubMed:23152498). {ECO:0000269|PubMed:12198132, ECO:0000269|PubMed:15498486, ECO:0000269|PubMed:17550970, ECO:0000269|PubMed:17101778, ECO:0000269|PubMed:19816406, ECO:0000269|PubMed:20070609, ECO:0000269|PubMed:20604901, ECO:0000269|PubMed:21040701, ECO:0000269|PubMed:23152498,

Molecular Weight: 59.1 kDa
UniProt: 013596

ECO:0000303|PubMed:15498486}.

### **Application Details**

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

### Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months