

[Go to Product page](#)

Datasheet for ABIN7554701
NDST1 Protein (AA 1-882) (His tag)

Overview

Quantity:	1 mg
Target:	NDST1
Protein Characteristics:	AA 1-882
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NDST1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant NDST1 Protein expressed in mammalian cells.
Sequence:	MPALACLRRLL CRHVSPQAVL FLLFIFCLFS VFISAYLYG WKRGLEPSAD APEPDCGDPP PVAPSRLPL KPVQAATPSR TDPLLVLFVE SLYSQLGQEV VAILESSRFK YRTEIAPGKG DMPTLTDKGR GRFALIYEN ILKYVNLD AW NRELLDKYCV AYGVGII GFF KANENSLLSA QLKGFPLFLH SNLGLKDCSI NPKSPLLYVT RPSEVEKGV L PGEDWTVFQS NHSTYEPVLL AKTRSSSIP HLGADAGLHA ALHATVVQDL GLHDGIQ RVL FGNNLNFWLH KLVFVDAVAF LTGKRLSLPL DRYILVDIDD IFVGKEGTRM KVEDVKALFD TQNELRAHIP NFTFNLGYSG KFFHTGTNAE DAGDLLLLSY VKEFWWFPHM WSHMQPHLFH NQSVLAEQMA LNKKFAVEHG IPTDMGYAVA PHHSGVYPVH VQLYEAWKQV WSIRVTSTEE YPHLKPARYR RGFHNGIMV LPRQTCGLFT HTIFYNEYPG GSSELDKIIN GGELFLTVLL NPISIFMTHL SNYGNDRLGL YTFKHLVRFL HSWTNLRLQT LPPVQLAQKY FQIFSEKDP LWQDPCEDKR HKDIWSKEKT CDRFPKLLII GPQKTGTTAL YLFLGMHPDL SSNYPSETF EEIQFFNGHN YHKGIDWYME FFPIPSNTTS DFYFEKSANY FDSEVAPRRA AALLPKAKVL TILINPADRA YSWYQHQR AH

Product Details

DDPVALKYTF HEVITAGSDA SSKLRALQNR CLVPGWYATH IERWLSAYHA NQILVLDGKL
LRTEPAKVMD MVQKFLGVTN TIDYHKTLAF DPKKGFWCQL LEGGKTKCLG KSKGRKYPEM
DLDSRAFLKD YYRDHNIELS KLLYKMGQTL PTWLREDLQN TR **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.**

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: NDST1

Alternative Name: NDST1 ([NDST1 Products](#))

Background: Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 1 (Glucosaminyl N-deacetylase/N-sulfotransferase 1) (NDST-1) (N-heparan sulfate sulfotransferase 1) (N-HSST 1) ([Heparan sulfate]-glucosamine N-sulfotransferase 1) (HSNST 1) [Includes: Heparan sulfate N-deacetylase 1 (EC 3.5.1.-), Heparan sulfate N-sulfotransferase 1 (EC 2.8.2.8)],FUNCTION: [Isoform 1]: Essential bifunctional enzyme that catalyzes both the N-deacetylation and the N-

Target Details

sulfation of glucosamine (GlcNAc) of the glycosaminoglycan in heparan sulfate (PubMed:9230113, PubMed:9744796, PubMed:35137078). Modifies the GlcNAc-GlcA disaccharide repeating sugar backbone to make N-sulfated heparosan, a prerequisite substrate for later modifications in heparin biosynthesis (PubMed:9230113). Plays a role in determining the extent and pattern of sulfation of heparan sulfate. Participates in biosynthesis of heparan sulfate that can ultimately serve as L-selectin ligands, thereby playing a role in inflammatory response (By similarity). Required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:22660413). {ECO:0000250|UniProtKB:Q3UHN9, ECO:0000269|PubMed:22660413, ECO:0000269|PubMed:9230113}, FUNCTION: [Isoform 3]: Lacks both N-deacetylase and N-sulfotransferase activities. Acts as a dominant negative on isoform 1, likely by changing the composition of enzyme complexes responsible for elongation and modification of heparan sulfates. {ECO:0000269|PubMed:35137078}.

Molecular Weight: 100.9 kDa

UniProt: [P52848](#)

Pathways: [Regulation of Systemic Arterial Blood Pressure by Hormones, Glycosaminoglycan Metabolic Process](#)

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