

Heparan sulfate N-deacetylase/N-sulfotransferase 1 Recombinant Protein | NDST1 recombinant protein

Recombinant Human Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 1

CATALOG # AAA114048	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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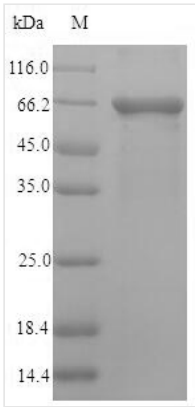
PRODUCT SYNONYMS

Heparan sulfate N-deacetylase/N-sulfotransferase 1; Recombinant Human 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; 2 domains: Heparan sulfate N-deacetylase 1 (EC:3.-.-.); Heparan sulfate N-sulfotransferase 1 (EC:2.8.2.-); NDST1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	40-556aa; Partial of Isoform 2
Sequence	GWKRGLEPSA DAPEPDCGDP PPVAPSRLLP LKPVQAATPS RTDPLVLVVFV ESLYSQLGQE VVAILESSRF KYRTEIAPGK GDMPTLTDKG RGRFALIYE NILKYVNLDA WNRELLDKYC VAYGVGIIGF FKANENSLLS AQLKGFPFLF HSNLGLKDCS INPKSPLLYV TRPSEVEKGV LPGEDWTVFQ SNHSTYEPVL LAKTRSSSEI PHLGADAGLH AALHATVVQD LGLHDGIQRV LFGNNLNFWL HKLVFVDAVA FLTGKRSLP LDRYILVDID DIFVGKEGTR MKVEDVKALF DTQNELRAHI PNFTFNLGYS GKFFHTGTNA EDAGDDL LLS YVKEFWWFPH MWSHMQPHLF HNQSVLAEQM ALNKKFAVEH GIPTDMGYAV APHHSVYPV HVQLYEA WKQ VWSIRVTSTE EYPHLKPARY RRGFIHNGIM VLPRQTCGLF THTIFYNEYP GGSSELDKII NGGELFLTVL LNPVSAPQPM AAGEKGLLHS LSAADTG FLE PGKGGEA
Production Note	Special Offer: The E Coli host-expressed protein is manufactured from a stock plasmid containing the protein gene. E Coli host-expressed protein is stocked in different unit sizes ranging from as small as 10 ug to as large as 1 mg. Bulk inventory is also available. The E Coli host-expressed protein has been ordered over and over again by researchers and has stood the test of time as both a robust protein and important target for the research community. It is part of our new program to make our most popular protein targets and corresponding hosts available in expanded unit sizes and with a quick processing time. Select E Coli host-expressed protein for the fastest delivery among all hosts. Please contact our or email to for more details.
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for NDST1 recombinant protein	Essential bifunctional enzyme that catalyzes both the N-deacetylation and the N-sulfation of glucosamine (GlcNAc) of the glycosaminoglycan in heparan sulfate. Modifies the GlcNAc-GlcA disaccharide repeating sugar backbone to make N-sulfated heparosan, a prerequisite substrate for later modifications in heparin biosynthesis. Plays a role in determining the extent and pattern of sulfation of heparan sulfate. Compared to other NDST enzymes, its presence is absolutely required. Participates in biosynthesis of heparan sulfate that can ultimately serve as L-selectin ligands, thereby playing a role in inflammatory response.
Product Categories/Family for NDST1 recombinant protein	Immunology
References	Cloning of the human heparan sulfate-N-deacetylase/N-sulfotransferase gene from the Treacher Collins syndrome candidate region at 5q32-q33.1.Dixon J., Loftus S.K., Gladwin A.J., Scambler P.J., Wasmuth J.J., Dixon M.J.Genomics 26:239-244(1995) Localization of human heparan glucosaminyl N-deacetylase/N-sulphotransferase to the trans-Golgi network.Humphries D.E., Sullivan B.M., Aleixo M.D., Stow J.L.Biochem. J. 325:351-357(1997) Labell T.L., Milewicz D.J., Bonadio J., Edelhoff S., Disteche C.M., Byers P.H. A role of Lys614 in the sulfotransferase activity of human heparan sulfate N-deacetylase/N-sulfotransferase.Sueyoshi T., Kakuta Y., Pedersen L.C., Wall F.E., Pedersen L.G., Negishi M.FEBS Lett. 433:211-214(1998) Overexpression of different isoforms of glucosaminyl N-deacetylase/N-sulfotransferase results in distinct heparan sulfate N-sulfation patterns.Pikas D.S., Eriksson I., Kjellen L.Biochemistry 39:4552-4558(2000) Antibody-based assay for N-deacetylase activity of heparan sulfate/heparin N-deacetylase/N-sulfotransferase (NDST) novel characteristics of NDST-1 and -2.van den Born J., Pikas D.S., Pisa B.J., Eriksson I., Kjellen L., Berden J.H.M.Glycobiology 13:1-10(2003) Crystal structure of the sulfotransferase domain of human heparan sulfate N-deacetylase/N-sulfotransferase 1.Kakuta Y., Sueyoshi T., Negishi M., Pedersen L.C.J. Biol. Chem. 274:10673-10676(1999) NDST1 missense mutations in autosomal recessive intellectual disability.Reuter M.S., Musante L., Hu H., Diederich S., Sticht H., Ekici A.B., Uebe S., Wienker T.F., Bartsch O., Zechner U., Oppitz C., Keleman K., Jamra R.A., Najmabadi H., Schweiger S., Reis A., Kahrizi K.Am. J. Med. Genet. A 164A:2753-2763(2014)

NCBI AND UNIPROT INFORMATION

NCBI GI #	666637969
NCBI GeneID	3340
NCBI Accession #	NP_001287992.1
NCBI GenBank Nucleotide #	NM_001301063.1
UniProt Accession #	P52848; Q96E57
Molecular Weight	73.5 kDa
NCBI Official Full Name	bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 1 isoform 2
NCBI Official Synonym Full Names	N-deacetylase/N-sulfotransferase 1

NCBI Official Symbol	NDST1
NCBI Official Synonym Symbols	HSST; NST1; MRT46
NCBI Protein Information	bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 1
UniProt Protein Name	Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 1
UniProt Gene Name	NDST1
UniProt Synonym Gene Names	HSST; HSST1; NDST-1; N-HSST 1; HSNST 1
UniProt Entry Name	NDST1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://www.aaabiotech.com/ndst1-recombinant-protein-e-coli/114048>