

Recombinant human HS3ST1 protein

Catalog Number: ATGP2320

PRODUCT INFORMATION

Expression system

E.coli

Domain

21-307aa

UniProt No.

O14792

NCBI Accession No.

NP_005105

Alternative Names

Heparan sulfate glucosamine 3-O-sulfotransferase 1, Heparan sulfate glucosamine 3-O-sulfotransferase 1, 3OST, 3OST1

PRODUCT SPECIFICATION

Molecular Weight

36.2 kDa (310aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 40% glycerol, 2mM DTT

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Heparan sulfate glucosamine 3-O-sulfotransferase 1, also known as HS3ST1, is sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) to catalyze the transfer of a sulfo group to position 3 of glucosamine residues in heparan. This protein catalyzes the rate limiting step in the biosynthesis of heparan sulfate (HSact). This modification is a crucial step in the biosynthesis of anticoagulant heparan sulfate as it completes the structure of the antithrombin pentasaccharide binding site. Recombinant human HS3ST1 protein, fused to His-tag at N-

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terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

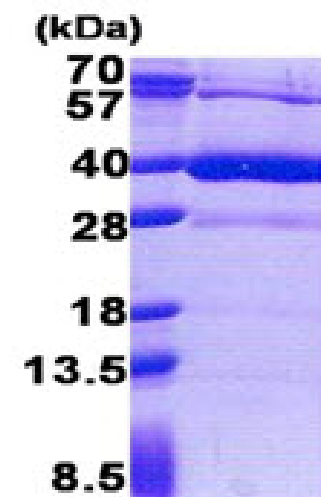
MGSSHHHHHH SSGLVPRGSH MGSRPAELGQ QELLRKAGTL QDDVRDGVAP NGSAAQLPQT IIIGVRKGGT RALLEMLSLH
PDVAAAENEV HFFDWEEHYS HGLGWYLSQM PFSWPHQLTV EKTPAYFTSP KVPERVYSMN PSIRLLLLLR DPSERVLSDY
TQVFYNHMQK HKPYPSIEEF LVRDGRNLVD YKALNRSLYH VHMQNWLRF PLRHHIVDG DRLIRDPFPE IQKVERFLKL
SPQINASNFY FNKTKGFYCL RDSGRDRCLH ESKGRAHPQV DPKLLNKLHE YFHEPNKKFF ELVGRTFDWH

General References

Shworak N.W., et al. (1997) J. Biol. Chem. 272:28008-28019

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)