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AR51144PU-N Human HS3ST1 / 3OST (21-307, His-tag) - Purified

Alternate names: 3-OST-1, 3OST1, Heparan sulfate D-glucosaminyl 3-O-sulfotransferase 1, Heparan sulfate glucosamine 3-O-sulfotransferase 1

Quantity: 0.25 mg

Concentration: 0.25 mg/ml (determined by Bradford assay)

Background: 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.

Uniprot ID: O14792

NCBI: NP_005105

GeneID: 9957

Species: Human

Source: E. coli

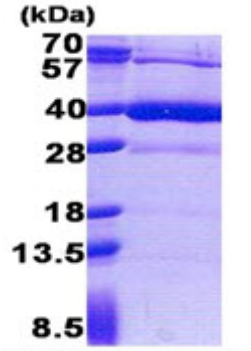
Format:
State: Liquid purified protein
Purity: >90% by SDS - PAGE
Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 40% glycerol, 2mM DTT

Description: Recombinant human HS3ST1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
AA Sequence:
MGSSHHHHHH SSGLVPRGSH MGSRPAELGQ QELLRKAGTL QDDVRDGVAP NGSAQQLPQT
IIIGVRKGGT RALLEMLSLH PDVAAAENEV HFFDWEEHYS HGLGWYLSQM PFSWPHQLTV
EKTPAYFTSP KVPERVYSMN PSIRLLLILR DPSERVLSDY TQVFYNHMQK HKPYPSIEEF
LVRDGRLNVD YKALNRSLYH VHMQNWLRFF PLRHIHIVDG DRLIRDPFPE IQKVERFLKL
SPQINASNFY FNKTKGFYCL RDSGRDRCLH ESKGRAHPQV DPKLLNKLHE YFHEPNKKFF
ELVGRTFDWH
Molecular weight: 36.2 kDa (310aa) confirmed by MALDI-TOF

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

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

Pictures:



15% SDS-PAGE (3ug)