

HS3ST1, 21-307aa, Human, His tag, E.coli

Cat.NO.: TP02504

3th Edition

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

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

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

Molecular Weight:36.2 kDa (310aa) confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMGSRPAELGQQELLRKAGTLQDDVRDGVAPNGSAQQLPQTIIGVRKGGTRALLE
MLSLHPDVAAAENEVHFFDWEHSHGLGWYLSQMPFSWPHQLTVEKTPAYFTSPKVPERVYSMNPSIRLLLLLRD
PSERVLSDYTQVFYNHMQKHKPYPSIEEFLVRDGRNLNVDYKALNRSLYHVMQNWLRFPLRHHIIVDGDRLIRDP
FPEIQKVERFLKLSPQINASNIFYFNKTKGFYCLRDGRDRCLHESKGRAHPQVDPKLLNKLHEYFHEPNKKFFELVG
RTFDWH

Purity:> 95% by HPLC

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

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.