Recombinant HS3S2 protein (His tag)

Catalog Number	541580
Synonyms	Heparan sulfate D-glucosaminyl 3-O-sulfotransferase 2; 3-OST-2; Heparan sulfate 3-O-sulfotransferase 2; h3-OST-2
Species	Human
Expression System	E. coli
Accession	Q9Y278
Molecular Weight	Predictes a molecular mass of 31.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	108-367
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 108-367 aa (Q9Y278) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This recombinant protein represents a stable and soluble fragment (residues 108-367) of Heparan sulfate glucosamine 3-O-sulfotransferase 2 (HS3ST2), a human sulfotransferase that specifically modifies heparan sulfate. This fragment is ideal for structural studies, enzymatic assays, and investigating heparan sulfate sulfation mechanisms. Heparan sulfate glucosamine 3-O-sulfotransferase 2 (HS3ST2) is a Golgi apparatus membrane-anchored enzyme that catalyzes the transfer of sulfo groups to N-unsubstituted glucosamine residues in heparan sulfate chains using 3'-phospho-5'-adenylyl sulfate (PAPS) as a sulfate donor. Unlike the related enzyme HS3ST1, HS3ST2 specifically sulfates glucosamine linked to 2-O-sulfo iduronic acid units and does not produce anticoagulant heparan sulfate, suggesting distinct biological roles in heparan sulfate modification and function. As a single-pass type II membrane protein, it localizes to the Golgi apparatus where heparan sulfate biosynthesis occurs.