Recombinant HS3SB protein (His tag)

Catalog Number	548610
Synonyms	Heparan sulfate D-glucosaminyl 3-O-sulfotransferase 3B1; 3-OST-3B; Heparan sulfate 3-O-sulfotransferase 3B1; h3-OST-3B
Species	Human
Expression System	E. coli
Accession	Q9Y662
Molecular Weight	Predictes a molecular mass of 31.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	132-390
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 132-390 aa (Q9Y662) 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 product is a recombinant fragment of Heparan sulfate glucosamine 3-O-sulfotransferase 3B1 (HS3ST3B1), corresponding to residues 132-390. It is designed for structural and biochemical studies, offering a stable and soluble unit ideal for investigating heparan sulfate modification and viral entry mechanisms. Heparan sulfate glucosamine 3-O-sulfotransferase 3B1 is a sulfotransferase enzyme that catalyzes the transfer of a sulfo group to glucosamine residues in heparan sulfate, using 3'-phospho-5'-adenylyl sulfate (PAPS) as a sulfate donor. It specifically targets N-unsubstituted glucosamine linked to 2-O-sulfo iduronic acid units, generating modified heparan sulfate that serves as a binding receptor for Herpes simplex virus-1 (HSV-1) entry. Unlike related enzymes such as HS3ST1, it does not confer anticoagulant activity to heparan sulfate. The full-length protein is localized to the Golgi apparatus membrane as a single-pass type II membrane protein, where it plays a key role in glycosaminoglycan biosynthesis and viral pathogenesis.