Recombinant CHST5 protein (His tag)

Catalog Number	545885
Synonyms	Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 4-alpha; GST4-alpha; Intestinal N-acetylglucosamine-6-O-sulfotransferase; I-GlcNAc6ST; Intestinal GlcNAc-6-sulfotransferase; hIGn6ST; N-acetylglucosamine 6-O-sulfotransferase 3; GlcNAc6ST-3; Gn6st-3
Species	Human
Expression System	E. coli
Accession	Q9GZS9
Molecular Weight	Predictes a molecular mass of 42.40 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	49-411
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 49-411 aa (Q9GZS9) 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	Recombinant Human Carbohydrate Sulfotransferase 5 (CHST5) Fragment (aa 49-411) is a high-purity, soluble protein designed for structural and biochemical studies. This 363-amino acid fragment retains key functional regions, enabling research into sulfotransferase activity and mucin-type acceptor sulfation without the complications of full-length membrane association. Carbohydrate Sulfotransferase 5 (CHST5) is a Golgi apparatus membrane-anchored enzyme that catalyzes the transfer of sulfate from 3'-phospho-5'-adenylyl sulfate (PAPS) to position 6 of non-reducing N-acetylglucosamine (GlcNAc) residues on mucin-type acceptors. It specifically acts on short carbohydrate substrates but shows no activity toward keratan or poly-N-acetyllactosamine structures. Located in the early secretory pathway, CHST5 plays a specialized role in glycosaminoglycan sulfation processes, though it does not generate ligands for SELL in high endothelial venules. The selected fragment (aa 49-411) represents a stable, soluble unit ideal for investigating the enzyme's catalytic mechanism and substrate specificity.