Recombinant CHST2 protein (His tag)

Catalog Number	543946
Synonyms	Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 2; GST-2; N-acetylglucosamine 6-O-sulfotransferase 1; GlcNAc6ST-1; Gn6ST-1
Species	Human
Expression System	E. coli
Accession	Q9Y4C5
Molecular Weight	Predictes a molecular mass of 42.94 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	163-530
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 163-530 aa (Q9Y4C5) 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 Carbohydrate Sulfotransferase 2 (CHST2) fragment (residues 163-530) from Homo sapiens, a stable and soluble unit designed for structural and biochemical studies. This fragment retains key functional regions of the enzyme, which catalyzes sulfate transfer to N-acetylglucosamine residues in glycans, supporting research in glycosylation and lymphocyte homing mechanisms. Carbohydrate Sulfotransferase 2 (CHST2) is a sulfotransferase that uses 3'-phospho-5'-adenylyl sulfate (PAPS) to transfer sulfate to position 6 of non-reducing N-acetylglucosamine residues in keratan-like structures on N-linked glycans and mucin-associated glycans. These sulfated glycans serve as ligands for SELL, playing a central role in lymphocyte homing to high endothelial cells (HEVs) at inflammation sites and specifically contributing to biosynthesis of the sialyl 6-sulfo Lewis X ligand and lymphocyte trafficking to Peyer patches. The enzyme exhibits no activity toward O-linked sugars and sulfates terminal GlcNAc residues, with substrate specificity potentially influenced by its localization in the Golgi apparatus and trans-Golgi network membrane as a single-pass type II membrane protein.