Recombinant CHST4 protein (His tag)

Catalog Number	543171
Synonyms	Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 3; GST-3; High endothelial cells N-acetylglucosamine 6-O-sulfotransferase; HEC-GlcNAc6ST; L-selectin ligand sulfotransferase; LSST; N-acetylglucosamine 6-O-sulfotransferase 2; GlcNAc6ST-2; Gn6st-2
Species	Human
Expression System	E. coli
Accession	Q8NCG5
Molecular Weight	Predictes a molecular mass of 43.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	29-386
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 29-386 aa (Q8NCG5) 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 4 (CHST4) fragment (amino acids 29-386) is a highly purified protein designed for studying sulfotransferase activity and SELL/L-selectin ligand biosynthesis. This 358-amino acid fragment offers a stable and soluble unit ideal for structural, enzymatic, and functional assays in immunology and glycobiology research. Carbohydrate Sulfotransferase 4 (CHST4) is a Golgi apparatus membrane-bound enzyme that catalyzes the transfer of sulfate groups from 3'-phospho-5'-adenylyl sulfate (PAPS) to the C-6 position of N-acetylglucosamine (GlcNAc) residues within O-linked mucin-type glycans. It plays a critical role in generating the sialyl 6-sulfo Lewis X determinant (MECA-79 epitope) for SELL/L-selectin recognition, which is essential for lymphocyte homing into peripheral lymph nodes and immune surveillance. The enzyme primarily acts on core 2 and extended core 1 O-linked glycans found on peripheral node addressins (PNAds) such as CD34 and GLYCAM1, expressed on high endothelial venules (HEVs). This activity facilitates lymphocyte tethering, rolling, and recruitment, with a notable role in B lymphocyte homing. CHST4 may also sulfate various oligosaccharides potentially involved in tumorigenesis.