Recombinant CHST6 protein (His tag)

Catalog Number	545891
Synonyms	Corneal N-acetylglucosamine-6-O-sulfotransferase; C-GlcNAc6ST; hCGn6ST; Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 4-beta; GST4-beta; N-acetylglucosamine 6-O-sulfotransferase 5; GlcNAc6ST-5; Gn6st-5
Species	Human
Expression System	E. coli
Accession	Q9GZX3
Molecular Weight	Predictes a molecular mass of 42.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	27-395
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 27-395 aa (Q9GZX3) 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 6 (CHST6) fragment (residues 27-395) is a high-purity protein designed for structural and biochemical studies. This 369-amino acid fragment retains key functional regions, offering a stable and soluble tool for investigating keratan sulfate biosynthesis and sulfotransferase activity. Carbohydrate sulfotransferase 6 (CHST6) is a Golgi membrane-localized enzyme that catalyzes the transfer of sulfate to position 6 of N-acetylglucosamine residues in keratan, using 3'-phospho-5'-adenylyl sulfate (PAPS) as a sulfonate donor. It collaborates with galactosyltransferase B4GALT4 and N-acetylglucosaminyltransferase B3GNT7 to assemble and elongate sulfated keratan sulfate disaccharide units, which are critical for corneal proteoglycan organization and transparency. Additionally, CHST6 sulfates endothelial mucins like GLYCAM1, highlighting its role in specialized glycosaminoglycan modification.