Recombinant CHST8 protein (His tag)

Catalog Number	548220
Synonyms	GalNAc-4-O-sulfotransferase 1; GalNAc-4-ST1; GalNAc4ST-1; N-acetylgalactosamine-4-O-sulfotransferase 1
Species	Human
Expression System	E. coli
Accession	Q9H2A9
Molecular Weight	Predictes a molecular mass of 34.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	144-424
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 144-424 aa (Q9H2A9) 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 8 (CHST8) Fragment (aa 144-424) is a high-purity protein designed for structural and biochemical studies. This fragment, representing a stable and soluble region of the GalNAc-4-O-sulfotransferase 1 enzyme, enables research into sulfotransferase activity and glycoprotein hormone regulation. Carbohydrate sulfotransferase 8 (CHST8), also known as GalNAc-4-O-sulfotransferase 1, catalyzes the transfer of sulfate to position 4 of terminal N-acetylgalactosamine (GalNAc) residues in N-glycans and O-glycans. This enzymatic activity is essential for the biosynthesis of glycoprotein hormones lutropin and thyrotropin, where it mediates sulfation of their carbohydrate structures. The enzyme specifically targets terminal GalNAcβ1-4GlcNAcβ motifs but shows no activity toward chondroitin. Located in the Golgi apparatus membrane as a single-pass type II membrane protein, CHST8 plays a critical role in post-translational modifications that influence hormone function and cellular signaling pathways.