Recombinant CHST9 protein (His tag)

Catalog Number	547572
Synonyms	GalNAc-4-O-sulfotransferase 2; GalNAc-4-ST2; GalNAc4ST-2; N-acetylgalactosamine-4-O-sulfotransferase 2
Species	Human
Expression System	E. coli
Accession	Q7L1S5
Molecular Weight	Predictes a molecular mass of 35.70 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	157-443
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 157-443 aa (Q7L1S5) 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	This product is a recombinant fragment of human Carbohydrate sulfotransferase 9 (CHST9), spanning residues 157-443. It represents a stable and soluble unit of the protein, optimized for structural and biochemical studies, including investigations into sulfotransferase activity and glycan modification. Carbohydrate sulfotransferase 9 (CHST9), also known as GalNAc-4-O-sulfotransferase 2, catalyzes the transfer of sulfate to position 4 of non-reducing N-acetylgalactosamine (GalNAc) residues in N-glycans and O-glycans. It plays a key role in the biosynthesis of glycoprotein hormones such as lutropin and thyrotropin by sulfating their carbohydrate structures, with higher activity toward carbonic anhydrase VI than lutropin. The enzyme is specific for terminal GalNAcbeta1,4GlcNAcbeta, and isoform 2 exhibits activity toward chondroitin. In its full-length form, isoform 1 is localized to the Golgi apparatus membrane as a single-pass type II membrane protein, while isoform 2 is secreted, highlighting its involvement in extracellular and intracellular sulfation processes critical for hormone function and glycan diversity.