Recombinant CHSTA protein (His tag)

Catalog Number	537224
Synonyms	HNK-1 sulfotransferase; HNK-1ST; HNK1ST; HuHNK-1ST
Species	Human
Expression System	E. coli
Accession	O43529
Molecular Weight	Predictes a molecular mass of 35.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	76-356
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 76-356 aa (O43529) 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 recombinant protein product features a 281-amino acid fragment (residues 76-356) of human Carbohydrate sulfotransferase 10 (CHST10), also known as HNK-1 sulfotransferase. The fragment represents a stable, soluble unit ideal for structural studies and biochemical assays investigating sulfotransferase activity and carbohydrate modification mechanisms. Carbohydrate sulfotransferase 10 (CHST10) is a Golgi apparatus membrane-anchored enzyme that catalyzes sulfate transfer from 3'-phosphoadenylyl sulfate to terminal glucuronic acid residues on protein- and lipid-linked oligosaccharides. It plays crucial roles in synthesizing the HNK-1 carbohydrate structure involved in neural development and synaptic plasticity, regulates laminin-binding epitopes on dystroglycan affecting extracellular matrix interactions, and modulates steroid hormone activity through sulfation of glucuronidated estrogens and androgens, thereby influencing hormonal cycles and fertility. This enzyme's multifunctional sulfotransferase activity makes it significant for studying neurodevelopment, extracellular matrix biology, and endocrine regulation.