Recombinant CHSTD protein (His tag)

Catalog Number	540793
Synonyms	Chondroitin 4-O-sulfotransferase 3; Chondroitin 4-sulfotransferase 3; C4ST-3; C4ST3
Species	Human
Expression System	E. coli
Accession	Q8NET6
Molecular Weight	Predictes a molecular mass of 35.65 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	48-341
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 48-341 aa (Q8NET6) 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 13 (CHST13) fragment (residues 48-341) is a high-purity protein designed for structural and biochemical studies. This 294-amino acid fragment retains key functional regions, offering a stable and soluble unit ideal for investigating chondroitin sulfation mechanisms. Carbohydrate sulfotransferase 13 (CHST13), also known as Chondroitin 4-O-sulfotransferase 3, catalyzes the transfer of sulfate to position 4 of N-acetylgalactosamine (GalNAc) residues in chondroitin. This enzymatic activity is critical for chondroitin sulfate biosynthesis, which forms the predominant proteoglycan in cartilage and is widely distributed on cell surfaces and extracellular matrices. The enzyme specifically sulfates beta1,4-linked GalNAc substituted with beta-linked glucuronic acid at the C-3 hydroxyl, showing no activity toward dermatan. Naturally localized to the Golgi apparatus membrane as a single-pass type II membrane protein, CHST13 plays a fundamental role in modulating extracellular matrix composition and cellular interactions.