Recombinant CHST3 protein (His tag)

Catalog Number	547582
Synonyms	Chondroitin 6-O-sulfotransferase 1; C6ST-1; Chondroitin 6-sulfotransferase; C6ST; Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 0; GST-0
Species	Human
Expression System	E. coli
Accession	Q7LGC8
Molecular Weight	Predictes a molecular mass of 41.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	130-479
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 130-479 aa (Q7LGC8) 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 350-amino acid fragment (residues 130-479) of Human Carbohydrate Sulfotransferase 3 (CHST3), also known as Chondroitin 6-O-sulfotransferase 1. This carefully selected fragment represents a stable, soluble unit of the enzyme that catalyzes key sulfation reactions in glycosaminoglycan biosynthesis, making it ideal for structural studies and biochemical characterization. Carbohydrate Sulfotransferase 3 is a Golgi apparatus membrane protein that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as a sulfonate donor to catalyze the transfer of sulfate to position 6 of the N-acetylgalactosamine residue of chondroitin. Chondroitin sulfate constitutes the predominant proteoglycan present in cartilage and is distributed on the surfaces of many cells and extracellular matrices. The enzyme also demonstrates lower efficiency in sulfating galactose residues of keratan sulfate and can catalyze sulfation of galactose residues in sialyl N-acetyllactosamine oligosaccharides. Emerging evidence suggests CHST3 may play a role in maintaining naive T-lymphocytes in the spleen, highlighting its importance in both extracellular matrix biology and immune system function.