Recombinant CHSTF protein (His tag)

Catalog Number	540592
Synonyms	B-cell RAG-associated gene protein; hBRAG; N-acetylgalactosamine 4-sulfate 6-O-sulfotransferase; GalNAc4S-6ST
Species	Human
Expression System	E. coli
Accession	Q7LFX5
Molecular Weight	Predictes a molecular mass of 50.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	148-561
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 148-561 aa (Q7LFX5) 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 15 (CHST15) Fragment (aa 148-561) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment, representing a stable catalytic domain of GalNAc4S-6ST, enables investigation into sulfotransferase activity and chondroitin sulfate modification without membrane-associated complexities. Carbohydrate Sulfotransferase 15 (CHST15), also known as GalNAc4S-6ST, is a Golgi apparatus membrane-anchored enzyme that catalyzes the transfer of sulfate from 3'-phosphoadenosine 5'-phosphosulfate (PAPS) to the C-6 hydroxyl group of GalNAc 4-sulfate in chondroitin sulfate A, forming chondroitin sulfate E. This activity generates GlcA-GalNAc(4,6-SO4) repeating units and contributes to highly sulfated structures like those in thrombomodulin chondroitin sulfate, which are critical for extracellular matrix organization and cell signaling. While some evidence suggests a potential role as a B-cell receptor involved in B-cell development and RAG expression regulation, this function requires further validation in vivo. The selected fragment (aa 148-561) omits the transmembrane region to enhance solubility, facilitating in vitro studies of its sulfotransferase mechanisms and interactions.