Recombinant G3ST4 protein (His tag)

Catalog Number	541069
Synonyms	Gal3ST-4; Beta-galactose-3-O-sulfotransferase 4; Gal-beta-1,3-GalNAc 3'-sulfotransferase
Species	Human
Expression System	E. coli
Accession	Q96RP7
Molecular Weight	Predictes a molecular mass of 24.53 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	284-486
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 284-486 aa (Q96RP7) 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 Galactose-3-O-sulfotransferase 4 (Gal3ST-4) Fragment (aa 284-486) is a high-purity, soluble protein designed for structural and biochemical studies. This 203-amino acid fragment retains key functional characteristics, enabling research into sulfotransferase activity and O-linked glycoprotein modification. Galactose-3-O-sulfotransferase 4 (Gal3ST-4) is a Golgi apparatus-localized enzyme that catalyzes the transfer of sulfate to beta-1,3-linked galactose residues in O-linked glycoproteins. As a single-pass type II membrane protein residing in the Golgi stack membrane, it specifically sulfates substrates including asialofetuin, Gal-beta-1,3-GalNAc, and Gal-beta-1,3 (GlcNAc-beta-1,6)GalNAc, playing a crucial role in glycoprotein sulfation processes essential for various biological functions. The selected fragment (aa 284-486) represents a stable, soluble unit optimized for experimental applications while maintaining relevance to the full-length protein's catalytic activity.