Recombinant SIA7A protein (His tag)

Catalog Number	543733
Synonyms	GalNAc alpha-2,6-sialyltransferase I; ST6GalNAc I; ST6GalNAc-I; ST6GalNAcI; hST6GalNAc-I; Sialyltransferase 7A; SIAT7-A
Species	Human
Expression System	E. coli
Accession	Q9NSC7
Molecular Weight	Predictes a molecular mass of 42.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	249-600
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 249-600 aa (Q9NSC7) 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 ST6GalNAc I Fragment (aa 249-600) - A high-quality, soluble protein fragment of Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1, specifically engineered for structural and biochemical studies. This fragment maintains key functional characteristics of the full-length enzyme involved in protein sialylation and intestinal homeostasis. Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1 (ST6GalNAc I) is a Golgi apparatus membrane protein that plays a crucial role in intestinal host-commensal homeostasis. This enzyme specifically conjugates sialic acid with an alpha-2-6 linkage to N-acetylgalactosamine (GalNAc) glycan chains on glycoproteins, catalyzing the formation of the sialyl-Tn (S-Tn) antigen. The S-Tn antigen is expressed in intestinal goblet cells and is associated with ulcerative colitis and various cancers. Protein sialylation by ST6GalNAc I in goblet cells is essential for maintaining mucus integrity and protecting intestinal mucus against excessive bacterial proteolytic degradation, highlighting its critical function in gut barrier defense and mucosal immunity.