Recombinant SIA7D protein (His tag)

Catalog Number	548236
Synonyms	NeuAc-alpha-2,3-Gal-beta-1,3-GalNAc-alpha-2,6-sialyltransferase; ST6GalNAc IV; ST6GalNAcIV; Sialyltransferase 3C; SIAT3-C; Sialyltransferase 7D; SIAT7-D
Species	Human
Expression System	E. coli
Accession	Q9H4F1
Molecular Weight	Predictes a molecular mass of 32.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	28-302
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 28-302 aa (Q9H4F1) 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 Alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3-N-acetyl-galactosaminide alpha-2,6-sialyltransferase (ST6GalNAc IV), a human sialyltransferase fragment (residues 28-302), engineered for stability and solubility. This 275-amino acid fragment enables structural and biochemical studies of sialylation mechanisms, supporting research in glycobiology and cellular signaling. The full-length ST6GalNAc IV enzyme, encoded by the ST6GALNAC4 gene in Homo sapiens, transfers sialyl groups from CMP-NeuAc to GalNAc residues within NeuAc-alpha-2,3-Gal-beta-1,3-GalNAc sequences on glycoproteins and glycolipids, forming alpha-2,6-linkages. It generates branched disialyl structures and exhibits a preference for O-glycans over other substrates, playing a critical role in glycosylation processes that influence cell communication and molecular recognition. As a single-pass type II membrane protein localized to the Golgi apparatus, it is integral to post-translational modifications in cellular biosynthesis pathways.