Recombinant FUT6 protein (His tag)

Catalog Number	540032
Synonyms	Fucosyltransferase 6; Fucosyltransferase VI; Fuc-TVI; FucT-VI; Galactoside 3-L-fucosyltransferase
Species	Human
Expression System	E. coli
Accession	P51993
Molecular Weight	Predictes a molecular mass of 39.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	35-359
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 35-359 aa (P51993) 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 FUT6 (Fucosyltransferase 6) Fragment (aa 35-359) is a high-purity, soluble protein designed for structural and functional studies. This 325-amino acid fragment retains key catalytic properties, enabling research into fucosylation processes involved in glycan biosynthesis and cell adhesion. FUT6 (Fucosyltransferase 6) is a Golgi-localized membrane protein that catalyzes the transfer of L-fucose to N-acetylglucosamine (GlcNAc) residues on glycoproteins and glycolipids via α-1,3 linkages. It plays a critical role in synthesizing sialyl Lewis X (sLe(x)), Lewis X (Le(x)), and VIM2 glycotopes, which are essential for cell-cell recognition and inflammatory responses. The enzyme acts preferentially on α2,3-sialylated lactosamine chains and H-type 2 acceptors but shows no activity toward type 1 chains. Isoform 1 is enzymatically active, while Isoform 2 lacks fucosyltransferase function. The recombinant fragment (aa 35-359) represents a stable, soluble domain ideal for investigating FUT6's biochemical mechanisms and substrate specificity.