Recombinant FUT9 protein (His tag)

Catalog Number	548537
Synonyms	Fucosyltransferase 9; Fucosyltransferase IX; Fuc-TIX; FucT-IX; Galactoside 3-L-fucosyltransferase
Species	Human
Expression System	E. coli
Accession	Q9Y231
Molecular Weight	Predictes a molecular mass of 36.81 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	62-359
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 62-359 aa (Q9Y231) 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 FUT9 (Fucosyltransferase 9) Fragment (residues 62-359) is a high-purity, soluble protein designed for structural and functional studies. This 298-amino acid fragment retains key catalytic activity, enabling researchers to investigate alpha(1->3) fucosylation mechanisms and Lewis antigen synthesis in a stable, experimentally accessible format. FUT9 (4-galactosyl-N-acetylglucosaminide 3-alpha-L-fucosyltransferase 9) is a Golgi-localized type II membrane protein that catalyzes the transfer of fucose from GDP-beta-L-fucose to N-acetylglucosamine in type 2 lactosamine structures. It generates Lewis x (Lex) and Lewis y (Ley) epitopes critical for cell adhesion and neuronal development, modifies polylactosamine chains to form VIM-2 antigens for SELE recognition, and can fucosylate milk oligosaccharides. The protein plays established roles in maintaining neuronal stemness, promoting neurite outgrowth, and contributing to cellular differentiation processes through its specific glycosylation activity.