Recombinant FUT7 protein (His tag)

Catalog Number	544878
Synonyms	1,3; Fucosyltransferase 7; Fucosyltransferase VII; Fuc-TVII; FucT-VII; Galactoside 3-L-fucosyltransferase; Selectin ligand synthase
Species	Human
Expression System	E. coli
Accession	Q11130
Molecular Weight	Predictes a molecular mass of 37.17 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	37-342
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 37-342 aa (Q11130) 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-(1,3)-fucosyltransferase 7 (FUT7) fragment (residues 37-342) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment retains key functional regions, enabling research into fucosylation mechanisms and sialyl Lewis X biosynthesis. Alpha-(1,3)-fucosyltransferase 7 (FUT7) is a Golgi apparatus membrane-bound enzyme that catalyzes the transfer of L-fucose to form sialyl Lewis X (sLe(x)) structures on glycoproteins and glycolipids. This enzyme plays a critical role in leukocyte trafficking by mediating selectin-dependent cell adhesion during inflammation, facilitates embryo implantation through cellular adhesion mechanisms, and may influence insulin signaling pathways. The full-length protein is localized in the trans cisternae of the Golgi apparatus as a type II membrane protein.