Recombinant TPBG protein (His tag)

Catalog Number	547278
Synonyms	5T4 oncofetal antigen; 5T4 oncofetal trophoblast glycoprotein; 5T4 oncotrophoblast glycoprotein; M6P1; Wnt-activated inhibitory factor 1; WAIF1
Species	Human
Expression System	E. coli
Accession	Q13641
Molecular Weight	Predictes a molecular mass of 34.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	61-355
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 61-355 aa (Q13641) 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 Trophoblast Glycoprotein (TPBG) Fragment (aa 61-355) is a high-purity protein designed for studying Wnt/beta-catenin signaling regulation. This fragment encompasses the LRRCT functional domain, making it an ideal tool for domain-specific functional assays and molecular interaction studies. Trophoblast glycoprotein (TPBG), also known as 5T4 oncofetal antigen or Wnt-activated inhibitory factor 1 (WAIF1), functions as an inhibitor of Wnt/beta-catenin signaling by indirectly interacting with LRP6 and blocking Wnt3a-dependent LRP6 internalization. This protein is localized to the cell membrane as a single-pass type I membrane protein, positioning it strategically for modulating cell surface signaling pathways involved in development and oncogenesis.