Recombinant WLS protein (His tag)

Catalog Number	545163
Synonyms	Integral membrane protein GPR177; Protein evenness interrupted homolog; EVI; Putative NF-kappa-B-activating protein 373
Species	Human
Expression System	E. coli
Accession	Q5T9L3
Molecular Weight	Predictes a molecular mass of 24.39 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	37-232
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 37-232 aa (Q5T9L3) 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 Protein Wntless Homolog (WLS) Fragment (residues 37-232) is a high-quality, soluble protein fragment designed for structural and biochemical studies. This fragment, derived from the integral membrane protein GPR177, represents a stable and functional unit ideal for investigating Wnt protein sorting and secretion mechanisms. Protein Wntless homolog (WLS) is a multi-pass membrane protein that plays a critical role in regulating Wnt protein sorting and secretion through a feedback regulatory mechanism. This reciprocal interaction is essential for controlling Wnt protein expression, subcellular localization, binding, and organelle-specific associations, with significant implications for anterior-posterior body axis formation during development. The full-length protein localizes to multiple membrane compartments, including the Golgi apparatus, cytoplasmic vesicles, cell membrane, endoplasmic reticulum, and early endosomes, where it co-localizes with adaptin AP2A2 at distinct punctae, highlighting its dynamic involvement in intracellular trafficking pathways.