Recombinant PGTB2 protein (His tag)

Catalog Number	547067
Synonyms	Geranylgeranyl transferase type II subunit beta; GGTase-II-beta; Rab geranyl-geranyltransferase subunit beta; Rab GG transferase beta; Rab GGTase beta; Rab geranylgeranyltransferase subunit beta; Type II protein geranyl-geranyltransferase subunit beta
Species	Human
Expression System	E. coli
Accession	P53611
Molecular Weight	Predictes a molecular mass of 38.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	2-331
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 2-331 aa (P53611) 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 Geranylgeranyl transferase type-2 subunit beta (RABGGTB) fragment (residues 2-331) is a high-purity protein designed for structural and biochemical studies. This fragment encompasses the functional domain critical for catalyzing geranylgeranyl transfer to Rab proteins, offering a stable and soluble solution for research applications. Geranylgeranyl transferase type-2 subunit beta (EC 2.5.1.60) is an essential enzyme in human cells that catalyzes the transfer of a geranylgeranyl group from geranylgeranyl diphosphate to Rab proteins, such as RAB1A, RAB3A, RAB5A, and RAB7A, which contain C-terminal sequences like -XXCC, -XCXC, or -CCXX. This post-translational modification is crucial for the membrane association and proper function of Rab GTPases, which regulate intracellular vesicular trafficking. The full-length protein's role in lipid modification underscores its significance in cellular transport processes, though subcellular localization details are not specified in the provided data.