Recombinant GBB2 protein (His tag)

Catalog Number	547137
Synonyms	I; S; T; G protein subunit beta-2; Transducin beta chain 2
Species	Human
Expression System	E. coli
Accession	P62879
Molecular Weight	Predictes a molecular mass of 38.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	2-340
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 2-340 aa (P62879) 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 G protein subunit beta-2 (GNB2) fragment (residues 2-340) is a high-purity protein designed for structural and biochemical studies. This fragment represents a stable and soluble unit of the protein, ideal for investigating G protein signaling mechanisms and interactions. Guanine nucleotide-binding proteins (G proteins) act as modulators or transducers in transmembrane signaling systems. The beta and gamma chains are essential for GTPase activity, GDP-GTP exchange, and G protein-effector interactions, playing a critical role in cellular communication. In humans, GNB2 is localized in the cytoplasm, perinuclear region, and cell membrane, underscoring its involvement in diverse signaling pathways at key cellular sites.