Recombinant TBC3G protein (His tag)

Catalog Number	549240
Species	Human
Expression System	E. coli
Accession	Q6DHY5
Molecular Weight	Predictes a molecular mass of 27.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	1-219
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 1-219 aa (Q6DHY5) 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 TBC1D3G (1-219) is a high-purity protein fragment of TBC1 domain family member 3G, designed for structural and biochemical studies. This 219-amino acid fragment represents a stable, soluble unit that maintains functional relevance as a RAB5 GTPase activating protein, making it ideal for investigating intracellular trafficking mechanisms. TBC1D3G (TBC1 domain family member 3G) functions as a GTPase activating protein specifically for RAB5, regulating its activity in intracellular membrane trafficking pathways. The protein localizes to the cell membrane through lipid anchoring and associates with lipid rafts, suggesting its involvement in specialized membrane domains critical for signal transduction and vesicular transport processes. This strategic localization positions TBC1D3G as a key regulator of early endosomal dynamics and membrane receptor trafficking.