Recombinant TBC12 protein (His tag)

Catalog Number	550059
Species	Human
Expression System	E. coli
Accession	O60347
Molecular Weight	Predictes a molecular mass of 45.16 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	402-775
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 402-775 aa (O60347) 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 TBC1D12 (402-775) Fragment - A high-purity protein fragment encompassing the complete Rab-GAP TBC domain (484-692) of TBC1 domain family member 12. This specialized construct serves as an essential tool for investigating RAB11A-mediated signaling pathways and neurite outgrowth mechanisms in neuronal development research. TBC1D12 is a RAB11A-binding protein that plays a critical role in neurite outgrowth, making it a protein of significant interest in neurobiology and cell signaling studies. The full-length protein localizes to endosomes, where it likely functions in membrane trafficking and intracellular transport processes. The Rab-GAP TBC domain contained within this recombinant fragment is responsible for the protein's GTPase-activating activity toward RAB family proteins, particularly RAB11A, positioning it as a key regulator of vesicular transport and neuronal development pathways.