Recombinant TBC13 protein (His tag)

Catalog Number	549384
Species	Human
Expression System	E. coli
Accession	Q9NVG8
Molecular Weight	Predictes a molecular mass of 48.21 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 51 kDa band.

Product Information

Sequence Region	1-400
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 1-400 aa (Q9NVG8) 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 TBC1 domain family member 13 (TBC1D13) fragment (amino acids 1-400) from Homo sapiens, encompassing the full Rab-GAP TBC domain. This high-purity protein is an essential tool for investigating RAB35 GTPase regulation and insulin-mediated GLUT4 trafficking mechanisms in metabolic research. TBC1D13 functions as a GTPase-activating protein (GAP) specifically targeting RAB35, playing a critical role in intracellular membrane trafficking. Research indicates its involvement in insulin-stimulated translocation of glucose transporter SLC2A4/GLUT4 to the plasma membrane in adipocytes, highlighting its significance in glucose homeostasis and metabolic regulation. The protein localizes to both membrane and cytoplasmic compartments, suggesting dynamic involvement in vesicular transport processes. The provided fragment contains the complete Rab-GAP TBC domain (residues 35-345), enabling focused study of this central functional region without interference from other protein segments.