Recombinant TBC20 protein (His tag)

Catalog Number	545648
Species	Human
Expression System	E. coli
Accession	Q96BZ9
Molecular Weight	Predictes a molecular mass of 28.78 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	1-237
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 1-237 aa (Q96BZ9) 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 20 (TBC1D20) fragment (amino acids 1-237) from Homo sapiens, offering a stable and soluble unit for investigating its GTPase-activating protein (GAP) activity. This fragment is ideal for structural studies and biochemical assays, enabling researchers to explore mechanisms of Rab GTPase regulation. TBC1D20 is a GTPase-activating protein that specifically targets Rab1, Rab2, and RAB18 small GTPase families, accelerating GTP hydrolysis by over five orders of magnitude. It plays a critical role in promoting RAB18 dissociation from the endoplasmic reticulum (ER) membrane into the cytosol and is involved in maintaining ER structure. As a multi-pass membrane protein localized to the membrane, TBC1D20 is essential for understanding intracellular trafficking and ER dynamics in cellular processes.