Recombinant RB22A protein (His tag)

Catalog Number	541520
Synonyms	Rab-22
Species	Human
Expression System	E. coli
Accession	Q9UL26
Molecular Weight	Predictes a molecular mass of 23.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	1-194
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 1-194 aa (Q9UL26) 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 Ras-related protein Rab-22A (Rab-22) fragment (amino acids 1-194) is a high-purity protein designed for structural and biochemical studies. This fragment represents a stable, soluble unit of Rab-22A, enabling researchers to investigate its role in endocytosis, intracellular trafficking, and GTP-binding mechanisms with enhanced experimental reliability. Ras-related protein Rab-22A, encoded by the RAB22A gene in Homo sapiens, is a GTP-binding protein involved in endocytosis and intracellular protein transport. It mediates the trafficking of transferrin (TF) from early endosomes to recycling endosomes and is essential for nerve growth factor (NGF)-mediated endocytosis of NTRK1, promoting neurite outgrowth. Rab-22A alternates between active GTP-bound and inactive GDP-bound states, exhibiting low GTPase activity. It localizes to endosome and cell membranes, early and late endosomes, cytoplasmic vesicles (including phagosomes), and cell projections such as ruffles, where it is recruited to phagosomes containing pathogens like Staphylococcus aureus or Mycobacterium tuberculosis. These functions highlight its significance in cellular trafficking and signaling pathways.