Recombinant RAB34 protein (His tag)

Catalog Number	543550
Synonyms	Ras-related protein Rab-39; Ras-related protein Rah
Species	Human
Expression System	E. coli
Accession	Q9BZG1
Molecular Weight	Predictes a molecular mass of 30.70 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	1-259
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-259 aa (Q9BZG1) 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-34 (EC 3.6.5.2), encompassing amino acids 1-259, is a high-purity fragment engineered for stability and solubility. This product supports research into intracellular membrane trafficking, phagosome maturation, and ciliogenesis, offering a reliable tool for structural and biochemical studies. Ras-related protein Rab-34 is a small GTPase that acts as a key regulator of intracellular membrane trafficking, cycling between inactive GDP-bound and active GTP-bound states to control vesicle formation, movement, and fusion. It facilitates lysosome redistribution to the peri-Golgi region, promotes phagosome maturation and fusion with lysosomes during pathogen clearance (e.g., Staphylococcus aureus and Mycobacterium tuberculosis), and is essential for ciliogenesis—particularly in early steps of intracellular cilium assembly, including ciliary vesicle trafficking and axoneme formation. Rab-34 also positively regulates hedgehog signaling and ciliary function. It localizes to the cytoplasm, Golgi apparatus, phagosomes, centrosomes, centrioles, and cilia, with recruitment to pathogen-containing phagosomes highlighting its role in immune responses.