Recombinant RAB5B protein (His tag)

Catalog Number	537876
Species	Human
Expression System	E. coli
Accession	P61020
Molecular Weight	Predictes a molecular mass of 21.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	2-184
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 2-184 aa (P61020) 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-5B (EC 3.6.5.2) fragment (residues 2-184) is a high-quality protein product designed for studying intracellular membrane trafficking mechanisms. This 183-amino acid fragment was computationally optimized for stability and solubility, making it ideal for structural, biochemical, and functional assays in life science research. Ras-related protein Rab-5B is a member of the Rab family of small GTPases that serve as master regulators of intracellular membrane trafficking pathways. These proteins cycle between inactive GDP-bound and active GTP-bound states to control multiple stages of vesicle transport including vesicle formation, movement, tethering, and fusion with target membranes. Rab-5B localizes to the cytoplasmic side of the cell membrane and early endosome membranes through lipid anchoring, and is also enriched in stage I melanosomes, indicating its involvement in endocytic pathways and melanosome biogenesis. As a key coordinator of membrane dynamics, Rab-5B recruits specific downstream effectors to orchestrate precise membrane trafficking events essential for cellular homeostasis and signaling.