Recombinant RAB2A protein (His tag)

Catalog Number	544744
Species	Human
Expression System	E. coli
Accession	P61019
Molecular Weight	Predictes a molecular mass of 25.07 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	2-212
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 2-212 aa (P61019) 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	Introducing recombinant human Ras-related protein Rab-2A (EC 3.6.5.2) fragment (residues 2-212), a highly stable and soluble protein unit ideal for structural biology and biochemical studies. This fragment captures the essential GTPase domain of RAB2A, enabling researchers to investigate its critical roles in intracellular membrane trafficking and autophagy regulation with exceptional experimental reliability. Ras-related protein Rab-2A is a small GTPase that serves as a master regulator of intracellular membrane trafficking, cycling between active GTP-bound and inactive GDP-bound states to control vesicle transport from donor to acceptor organelles. This protein plays a pivotal role in maintaining organelle identity and morphology through its regulation of endoplasmic reticulum to Golgi complex protein transport and Golgi compacted morphology. Recent research highlights RAB2A's crucial function in autophagy, where it promotes autophagosome-lysosome fusion by recruiting the HOPS endosomal tethering complex. RAB2A localizes to multiple intracellular membranes including the endoplasmic reticulum-Golgi intermediate compartment, Golgi apparatus, autophagosomes, and secretory vesicles, functioning as a lipid-anchored protein on the cytoplasmic side of these membranes. Together with RAB2B, it is redundantly required for efficient autophagic flux, making it an essential target for understanding cellular degradation pathways and membrane dynamics.