Recombinant RAB6A protein (His tag)

Catalog Number	546826
Synonyms	Rab-6
Species	Human
Expression System	E. coli
Accession	P20340
Molecular Weight	Predictes a molecular mass of 21.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	2-176
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 2-176 aa (P20340) 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-6A (Rab-6) fragment (residues 2-176) is a high-purity, stable protein designed for structural and biochemical studies. This fragment captures the essential GTPase domain of Rab-6A, a key regulator of intracellular membrane trafficking, offering researchers a reliable tool to investigate COPI-independent retrograde transport mechanisms in cellular systems. Ras-related protein Rab-6A (Rab-6) is a small GTPase that functions as a critical regulator of intracellular membrane trafficking, cycling between inactive GDP-bound and active GTP-bound states to coordinate vesicle formation, movement, and fusion. Specifically, Rab-6A mediates COPI-independent retrograde transport from the Golgi apparatus to the endoplasmic reticulum (ER) and recruits effectors like VPS13B to Golgi membranes. It also plays a role in neuron projection development. Localized primarily to the Golgi apparatus membrane via lipid anchoring, Rab-6A is also found on cytoplasmic vesicles, including secretory and acrosome membranes. Its activity is facilitated by interactions with proteins such as BICD2, underscoring its importance in maintaining cellular organization and trafficking pathways.