Recombinant RAB3 protein (His tag)

Catalog Number	532852
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q94986
Gene ID	173971
Molecular Weight	Predictes a molecular mass of 26.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	1-219
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 1-219 aa (Q94986) 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 Ras-related protein Rab-3 (rab-3) from Caenorhabditis elegans, encompassing amino acids 1-219. This fragment is optimized for stability and solubility, making it ideal for structural studies, biochemical assays, and functional investigations into synaptic vesicle regulation. Ras-related protein Rab-3 is involved in exocytosis by regulating a late step in synaptic vesicle fusion, potentially influencing neurotransmitter release through membrane flow control in nerve terminals. It also contributes to the recruitment of endophilin unc-57 to synaptic vesicles and plays a role in dense-core vesicle trafficking, which is critical for axon tract formation in the ventral nerve cord. The protein localizes to the cell membrane, anchored via lipids on the cytoplasmic side, underscoring its importance in intracellular signaling and vesicular transport pathways.