Recombinant RIN3 protein (His tag)

Catalog Number	543213
Synonyms	Ras interaction/interference protein 3
Species	Human
Expression System	E. coli
Accession	Q8TB24
Molecular Weight	Predictes a molecular mass of 45.56 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	597-985
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 597-985 aa (Q8TB24) 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 the recombinant protein fragment of Ras and Rab interactor 3 (RIN3), encompassing amino acids 597-985. This fragment is engineered to include the complete VPS9 and Ras-associating domains, making it an essential tool for investigating RAB5B and RAB31 guanine nucleotide exchange mechanisms and Ras effector interactions in cellular signaling pathways. Ras and Rab interactor 3 (RIN3) is a human Ras effector protein that functions as a guanine nucleotide exchange factor (GEF) for RAB5B and RAB31, facilitating the exchange of GDP for GTP to activate these Rab GTPases. This activity is crucial for normal RAB31 function in vesicular trafficking and signal transduction. The protein localizes primarily to the cytoplasm, cytoplasmic vesicles, and early endosomes, with studies showing that tyrosine phosphorylation signaling induces its translocation to cytoplasmic vesicles, highlighting its dynamic role in membrane trafficking regulation.