Recombinant RIN2 protein (His tag)

Catalog Number	547845
Synonyms	Ras association domain family 4; Ras inhibitor JC265; Ras interaction/interference protein 2
Species	Human
Expression System	E. coli
Accession	Q8WYP3
Molecular Weight	Predictes a molecular mass of 46.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	508-895
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 508-895 aa (Q8WYP3) 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 human Ras and Rab interactor 2 (RIN2) fragment (residues 508-895), a meticulously engineered protein designed for in-depth functional studies. This 388-amino acid fragment fully encompasses the VPS9 and Ras-associating domains, making it an ideal tool for investigating RIN2's role in endocytic regulation and Ras signaling pathways. Ras and Rab interactor 2 (RIN2) functions as a Ras effector protein that plays a crucial role in the endocytic pathway. It serves as both an upstream activator and downstream effector for RAB5B, potentially acting as a guanine nucleotide exchange factor (GEF) that activates RAB5 proteins by exchanging bound GDP for GTP. This activation mechanism is essential for proper endosomal trafficking and membrane dynamics. The protein is primarily localized in the cytoplasm, where it coordinates signaling events between Ras and Rab GTPases, making it a key regulator of intracellular transport processes.