Recombinant RIN1 protein (His tag)

Catalog Number	544940
Synonyms	Ras inhibitor JC99; Ras interaction/interference protein 1
Species	Human
Expression System	E. coli
Accession	Q13671
Molecular Weight	Predictes a molecular mass of 17.03 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	55-192
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 55-192 aa (Q13671) 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 and Rab Interactor 1 (RIN1) Fragment (aa 55-192) is a high-purity protein designed for studying the SH2 domain's role in Ras signaling modulation, cytoskeletal regulation, and endocytosis pathways. This fragment provides a targeted tool for investigating domain-specific interactions in cellular processes. Ras and Rab Interactor 1 (RIN1) is a multifunctional Ras effector protein that modulates neuronal plasticity and aversive memory formation. It regulates Ras signaling through three primary mechanisms: competing with RAF1 for Ras binding, enhancing ABL1/ABL2-mediated cytoskeletal remodeling, and activating RAB5A to promote receptor endocytosis via potential guanine nucleotide exchange factor activity. The protein localizes to the cytoplasm, membrane, and cytoskeleton, with partial membrane association supporting its role in signal transduction and vesicular trafficking pathways.