Recombinant RIC1 protein (His tag)

Catalog Number	545100
Synonyms	Connexin-43-interacting protein of 150 kDa; Protein RIC1 homolog; RAB6A-GEF complex partner protein 1
Species	Human
Expression System	E. coli
Accession	Q4ADV7
Molecular Weight	Predictes a molecular mass of 49.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	1-433
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-433 aa (Q4ADV7) 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 RIC1 Protein (Fragment 1-433) is a high-quality, stable, and soluble fragment of the Guanine nucleotide exchange factor subunit RIC1, designed for structural and biochemical studies. This fragment supports research into RAB6A activation, endosome-Golgi vesicle fusion, and cartilage development mechanisms. RIC1, also known as Connexin-43-interacting protein of 150 kDa, functions as part of the RIC1-RGP1 complex to activate RAB6A by catalyzing GDP-GTP exchange, facilitating endosome-derived vesicle fusion with the Golgi compartment and mannose-6-phosphate receptor recycling. It is essential for GJA1 phosphorylation and localization, regulates procollagen transport and secretion, and plays a critical role in cartilage morphogenesis and craniofacial skeleton development. The protein localizes to the cytoplasm, cytosol, and membrane, underscoring its involvement in intracellular trafficking and developmental processes.