Recombinant RIC3 protein (His tag)

Catalog Number	545307
Synonyms	Resistant to inhibitor of cholinesterase 3
Species	Human
Expression System	E. coli
Accession	Q7Z5B4
Molecular Weight	Predictes a molecular mass of 11.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	117-200
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 117-200 aa (Q7Z5B4) 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 RIC-3 Protein Fragment (residues 117-200) - A stable and soluble fragment of the Protein RIC-3 molecular chaperone, specifically designed for structural and biochemical studies. This 84-amino acid fragment provides researchers with a reliable tool to investigate the mechanisms underlying nicotinic acetylcholine receptor assembly and trafficking. Protein RIC-3 (Resistant to inhibitor of cholinesterase 3) is a crucial molecular chaperone that facilitates proper subunit assembly and surface trafficking of alpha-7 and alpha-8 nicotinic acetylcholine receptors. This protein plays a vital role in promoting functional expression of various neurotransmitter receptors, including homomeric serotoninergic 5-HT3 receptors and heteromeric acetylcholine receptor combinations such as alpha-3/beta-2, alpha-3/beta-4, alpha-4/beta-2, and alpha-4/beta-4. In its native form, RIC-3 localizes to the endoplasmic reticulum membrane as a single-pass membrane protein, with some isoforms also present in the Golgi apparatus membrane, highlighting its importance in intracellular protein processing and quality control pathways.