Recombinant GRIP1 protein (His tag)

Catalog Number	548579
Synonyms	GRIP-1
Species	Human
Expression System	E. coli
Accession	Q9Y3R0
Molecular Weight	Predictes a molecular mass of 32.30 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	48-335
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 48-335 aa (Q9Y3R0) 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 Glutamate receptor-interacting protein 1 (GRIP-1) fragment (amino acids 48-335) is a high-purity protein designed for studying the specific functions of its PDZ domains. This 288-amino acid fragment fully encompasses the PDZ 1 and PDZ 2 domains, making it an ideal tool for investigating protein-protein interactions and signaling complex assembly in neuronal research. Glutamate receptor-interacting protein 1 (GRIP-1) functions as a critical scaffold protein that organizes multiprotein signaling complexes and mediates the trafficking of binding partners within neurons. It plays a key role in controlling the intracellular fate of AMPA receptors and regulates the endosomal sorting of GRIA2 subunits toward recycling and membrane targeting. The protein localizes to multiple subcellular compartments including cytoplasmic vesicles, perikaryon, dendrites, postsynaptic membranes, postsynaptic densities, endoplasmic reticulum membranes, and the endomembrane system, where it acts as a peripheral membrane protein. Its enrichment in postsynaptic structures underscores its importance in synaptic organization and neuronal signaling pathways.