Recombinant GRAP protein (His tag)

Catalog Number	547276
Species	Human
Expression System	E. coli
Accession	Q13588
Molecular Weight	Predictes a molecular mass of 26.99 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1-217
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 1-217 aa (Q13588) 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 GRB2-related adapter protein (GRAP) fragment (amino acids 1-217) is a high-purity protein designed for studying Ras signaling pathways. This fragment includes all key functional domains—SH3 1, SH2, and SH3 2—making it an ideal tool for investigating tyrosine kinase-mediated signal transduction mechanisms. The full-length GRB2-related adapter protein (GRAP), encoded by the GRAP gene in Homo sapiens, functions as a critical signaling adapter that couples receptor and cytoplasmic tyrosine kinases to the Ras signaling pathway. It plays a documented role in the inner ear and hearing processes, as supported by research (PubMed:30610177). Subcellularly, GRAP localizes to the membrane as a peripheral membrane protein and is notably present at presynaptic terminals in synapses, indicating its importance in neuronal communication and signal integration at these sites.