Recombinant CCG3 protein (His tag)

Catalog Number	544136
Synonyms	Neuronal voltage-gated calcium channel gamma-3 subunit; Transmembrane AMPAR regulatory protein gamma-3; TARP gamma-3
Species	Human
Expression System	E. coli
Accession	O60359
Molecular Weight	Predictes a molecular mass of 10.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	29-103
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 29-103 aa (O60359) 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 Voltage-dependent calcium channel gamma-3 subunit (CACNG3) fragment (residues 29-103), a 75-amino acid protein designed for structural and functional studies of neuronal ion channel regulation and AMPA receptor trafficking. The full-length Voltage-dependent calcium channel gamma-3 subunit (CACNG3) is a multi-pass membrane protein that regulates the trafficking and gating properties of AMPA-selective glutamate receptors (AMPARs) in neurons. It promotes AMPAR targeting to the somatodendritic cell membrane and synapses while modulating receptor kinetics by slowing activation, deactivation, and desensitization rates. The protein also functions to stabilize voltage-dependent calcium channels in an inactivated state, playing a crucial role in neuronal signaling and synaptic plasticity.