Recombinant NEUG protein (His tag)

Catalog Number	545597
Synonyms	Ng; RC3; 55-78
Species	Human
Expression System	E. coli
Accession	Q92686
Molecular Weight	Predictes a molecular mass of 9.27 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 9 kDa band.

Product Information

Sequence Region	1-78
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 1-78 aa (Q92686) 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 Neurogranin (Ng) Fragment (1-78) is a high-purity protein designed for studying synaptic development and remodeling. This fragment encompasses key functional domains, including the IQ and Collagen-like regions, making it an ideal tool for investigating protein kinase C-mediated signaling pathways and calmodulin interactions in neurological research. Neurogranin (Ng), encoded by the NRGN gene in Homo sapiens, functions as a 'third messenger' substrate in protein kinase C-mediated molecular cascades during synaptic development and remodeling. It binds to calmodulin in the absence of calcium, playing a critical role in neuronal plasticity and signaling processes. This protein is significant for understanding mechanisms underlying synaptic function and structural changes in the nervous system.