Recombinant CBLN2 protein (His tag)

Catalog Number	550437
Species	Human
Expression System	E. coli
Accession	Q8IUK8
Molecular Weight	Predictes a molecular mass of 16.71 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	91-224
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 91-224 aa (Q8IUK8) 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 Cerebellin-2 (CBLN2) Fragment (aa 91-224) is a highly stable and soluble protein fragment designed for structural and biochemical studies. This product captures a key functional region of Cerebellin-2, a synaptic organizer essential for maintaining excitatory synapse integrity and regulating neurotransmitter receptor activity in specific neuronal circuits. Cerebellin-2, encoded by the CBLN2 gene in humans, functions as a critical synaptic organizer in selective neuronal populations within the brain. It is secreted and operates as part of a trans-synaptic complex by binding to postsynaptic GRID1 and presynaptic neurexins (NRXN1B and NRXN3B). This interaction is vital for the long-term maintenance, though not initial formation, of excitatory synapses. Specifically, the NRXN1B-CBLN2-GRID1 complex modulates postsynaptic NMDA receptor responses, while the NRXN3B-CBLN2-GRID1 complex influences AMPA receptor activity, highlighting its role in fine-tuning synaptic transmission without affecting synapse establishment.