

Recombinant Mouse CBLN2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51726

Size: 10ug, 100ug

Protein Name: Cerebellin-2

Synonym: Cbln2

UniProt ID: Q8BGU2

UniProt Link: www.uniprot.org/uniprotkb/Q8BGU2/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 224 AA

Molecular Weight: 24 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MPAPGQGPRGPLLSMPGRRGALREPADFGSSLGAVLALLLLLLPACCPVRAQNDTEPIVLEGKCLVV
CDSSPSGDGAVTSSLGISVRSGSAKVAFSATRSTNHEPSEMSNRTMTIYFDQVLVNIGNHFDLASSIF
VAPRKGIYSFSFHVVKVYNRQTIQVSLMQNGYPVISAFAGDQDVTREAASNGVLLLMEREDKVHLKL
ERGNLMGGWKYSTFSGFLVFPL

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Cerebellin-2 produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Acts as a synaptic organizer in specific subsets of neurons in the brain (PubMed:21410790, PubMed:29691328). Essential for long-term maintenance but not establishment of excitatory synapses (PubMed:29691328, PubMed:30287486). Functions as part of a trans-synaptic complex by binding to postsynaptic GRID1 and presynaptic neurexins. This interaction helps regulate the activity of NMDA and AMPA receptors at hippocampal synapses without affecting synapse formation. NRXN1B-CBLN2-GRID1 complex transduce presynaptic signals into postsynaptic NMDAR response. NRXN3B-CBLN2-GRID1 complex transduce presynaptic signals into postsynaptic AMPAR response (PubMed:34135511).

Subcellular Localization: Secreted .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.