

## CBLN1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54632

#### Specification

# **CBLN1** Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC-P, IHC-F, IF, ICC, E <u>P23435</u> Rat, Pig Rabbit Polyclonal 21097

### **CBLN1** Polyclonal Antibody - Additional Information

Gene ID 869

Other Names Cerebellin-1, Precerebellin, Cerebellin, CER, [des-Ser1]-cerebellin, CBLN1

Dilution <span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **CBLN1** Polyclonal Antibody - Protein Information

Name CBLN1

#### Function

Required for synapse integrity and synaptic plasticity. During cerebellar synapse formation, essential for the matching and maintenance of pre- and post-synaptic elements at parallel fiber-Purkinje cell synapses, the establishment of the proper pattern of climbing fiber-Purkinje cell innervation, and induction of long-term depression at parallel fiber-Purkinje cell synapses. Plays a role as a synaptic organizer that acts bidirectionally on both pre- and post- synaptic components. On the one hand induces accumulation of synaptic vesicles in the pre-synaptic part by binding with NRXN1 and in other hand induces clustering of GRID2 and its associated proteins at the post-synaptic site through association of GRID2. NRXN1-CBLN1-GRID2 complex directly induces parallel fiber protrusions that encapsulate spines of Purkinje cells leading to accumulation of GRID2 and synaptic vesicles. Required for CBLN3 export from the endoplasmic reticulum and



secretion (By similarity). NRXN1-CBLN1-GRID2 complex mediates the D- Serine-dependent long term depression signals and AMPA receptor endocytosis (PubMed:<a href="http://www.uniprot.org/citations/27418511" target="\_blank">27418511</a>). Essential for long-term maintenance but not establishment of excitatory synapses (By similarity). Inhibits the formation and function of inhibitory GABAergic synapses in cerebellar Purkinje cells (By similarity).

Cellular Location Secreted {ECO:0000250|UniProtKB:Q9R171}. Postsynaptic cell membrane {ECO:0000250|UniProtKB:Q9R171}

**Tissue Location** In the Purkinje cells postsynaptic structures. In the cerebellum, cerebellin is much less abundant than [des-Ser1]- cerebellin

### **CBLN1** Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**CBLN1 Polyclonal Antibody - Images** 



Paraformaldehyde-fixed, paraffin embedded (rat cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CBLN1) Polyclonal Antibody, Unconjugated (bs-11814R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.