Datasheet for ABIN7233031

anti-PCLO antibody

Go to Product page

Overview

Quantity:	100 µg
Target:	PCLO
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PCLO antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Anti-Piccolo Mouse Monoclonal Antibody
Immunogen:	Full-length human Piccolo protein (accession no. BC001304.1)
Clone:	6H9-B6
Isotype:	IgG2b
Specificity:	This antibody recognizes human and rat Piccolo isoforms (other species not yet tested). It does not cross-react with Bassoon.
Cross-Reactivity:	Human, Rat

Target Details

Target:	PCLO
Alternative Name:	Pclo (PCLO Products)

Target Details

Background:	Protein piccolo,Scaffold protein of the presynaptic cytomatrix at the active zone (CAZ) which is the place in the synapse where neurotransmitter is released (PubMed:19812333). After synthesis, participates in the formation of Golgi-derived membranous organelles termed Piccolo-Bassoon transport vesicles (PTVs) that are transported along axons to sites of nascent synaptic contacts (By similarity). At the presynaptic active zone, regulates the spatial organization of synaptic vesicle cluster, the protein complexes that execute membrane fusion and compensatory endocytosis (By similarity). Organizes as well the readily releasable pool of synaptic vesicles and safeguards a fraction of them to be not immediately available for action potential-induced release (By similarity). Functions also in processes other than assembly such as the regulation of specific presynaptic protein ubiquitination by interacting with SIAH1 or the regulation of presynaptic autophagy (PubMed:28231469) (By similarity). Mediates also synapse to nucleus communication leading to rUniProtKB:Q9JKS6, PubMed:19812333, PubMed:28231469}.,Piccolo is a novel component of the presynaptic cytoskeletal matrix (PCM) assembled at the active zone of neurotransmitter release. Piccolo is a multidomain zinc finger protein structurally related to Bassoon, another PCM protein. Both proteins share components of glutamatergic and GABAergic CNS synapses. Piccolo zinc fingers interact with the dual prenylated rab3A and VAMP2/Synaptobrevin II receptor PRA1. Piccolo is involved in endo- and exocytosis of synaptic vesicles and has been shown to interfere with clathrin- mediated endocytosis by binding to the F- actin and dynamin bind protein Abp1.,Cell junction, synapse, presynaptic active zone,Aczonin, Brain-derived HLMN protein, Multidomain presynaptic cytomatrix protein
UniProt:	Q9QYX7
Pathways:	Hormone Transport, Synaptic Vesicle Exocytosis

Application Details

Application Notes:	Immunoblotting: use at 1-10 µg/mL. A band of ~550 kDa is detected ELISA: use at 1-10 µg/mL with Piccolo on the solid phase. These are recommended concentrations. User should determine optimal concentrations for their application. Positive control: Rat brain lysate.
Restrictions:	For Research Use only

Handling

Format:	Liquid

Handling

Reconstitution:	Dilute in PBS or medium that is identical to that used in the assay system.
Concentration:	Lot specific
Buffer:	PBS, pH 7.4, 50 % glycerol, 0.09 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	This antibody is stable for at least one (1) year at -20°C.