

Product datasheet

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ARG42382 anti-PCLO antibody [PCLO-01] (PE)

Package: 50 μg Store at: 4°C

Summary

Product Description PE-conjugated Mouse Monoclonal antibody [PCLO-01] recognizes PCLO

Tested Reactivity Hu
Tested Application FACS

Specificity The mouse monoclonal antibody PCLO-01 recognizes PCLO (Piccolo), a more than 400 kDa multidomain

protein expressed mainly in the presynaptic cytoplasmatic matrix of the neurons.

Host Mouse

Clonality Monoclonal
Clone PCLO-01

Isotype IgG1
Target Name PCLO
Species Human

Immunogen Human recombinant PCLO protein.

Conjugation PE

Alternate Names ACZ; Protein piccolo; PCH3; Aczonin

Application Instructions

Application table	Application	Dilution
	FACS	1 - 5 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Purified

Buffer PBS and 15 mM Sodium azide.

Preservative 15 mM Sodium azide

Concentration 0.1 mg/ml

Storage instruction Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

PCLO

Gene Full Name

piccolo presynaptic cytomatrix protein

Background

The protein encoded by this gene is part of the presynaptic cytoskeletal matrix, which is involved in establishing active synaptic zones and in synaptic vesicle trafficking. Variations in this gene have been associated with bipolar disorder and major depressive disorder. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2011]

Function

Scaffold protein of the presynaptic cytomatrix at the active zone (CAZ) which is the place in the synapse where neurotransmitter is released (By similarity). After synthesis, participates in the formation of Golgiderived 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 (By similarity). Mediates also synapse to nucleus communication leading to reconfiguration of gene expression by associating with the transcriptional corepressor CTBP1 and by subsequently reducing the size of its pool available for nuclear import (By similarity). [UniProt]

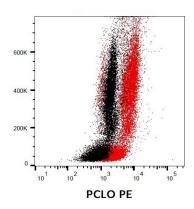
Calculated Mw

561 kDa

Cellular Localization

Cell junction, synapse. Note=Concentrated at the presynaptic side of synaptic junctions. [UniProt]

Images



ARG42382 anti-PCLO antibody [PCLO-01] (PE) FACS image

Flow Cytometry: Human peripheral blood stained with ARG42382 anti-PCLO antibody [PCLO-01] (PE) (red dots) or <u>ARG65337</u> Mouse IgG1 Kappa Isotype Control antibody [MOPC-21] (PE) (black dots, control).