ARG40852
anti-DPYSL2 / CRMP2 phospho (Thr555) antibody [M539]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [M539] recognizes DPYSL2 / CRMP2 phospho (Thr555)
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	M539
Isotype	IgG1
Target Name	DPYSL2 / CRMP2
Species	Human
Immunogen	Phosphospecific peptide (coupled to carrier protein) around Thr555 of Human CRMP2.
Conjugation	Un-conjugated
Alternate Names	Unc-33-like phosphoprotein 2; Dihydropyrimidinase-related protein 2; Collapsin response mediator protein 2; DRP2; ULIP2; N2A3; DRP-2; DHPRP2; ULIP-2; CRMP-2; CRMP2

Application Instructions

Application table

Application	Dilution
WB	1:500

Application Note: WB: Antibody is suggested to be diluted in 5% skimmed milk/Tris buffer with 0.04% Tween20 and incubated for 1 hour at room temperature.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

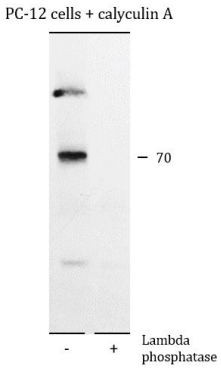
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.05% Sodium azide, 50% Glycerol and 1 mg/ml BSA.
Preservative	0.05% Sodium azide
Stabilizer	50% Glycerol and 1 mg/ml BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. 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	DPYSL2
Gene Full Name	dihydropyrimidinase-like 2
Background	This gene encodes a member of the collapsin response mediator protein family. Collapsin response mediator proteins form homo- and hetero-tetramers and facilitate neuron guidance, growth and polarity. The encoded protein promotes microtubule assembly and is required for Sema3A-mediated growth cone collapse, and also plays a role in synaptic signaling through interactions with calcium channels. This gene has been implicated in multiple neurological disorders, and hyperphosphorylation of the encoded protein may play a key role in the development of Alzheimer's disease. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Sep 2011]
Function	Plays a role in neuronal development and polarity, as well as in axon growth and guidance, neuronal growth cone collapse and cell migration. Necessary for signaling by class 3 semaphorins and subsequent remodeling of the cytoskeleton. May play a role in endocytosis. [UniProt]
Calculated Mw	62 kDa
PTM	3F4, a monoclonal antibody which strongly stains neurofibrillary tangles in Alzheimer disease brains, specifically labels DPYSL2 when phosphorylated on Ser-518, Ser-522 and Thr-509. Phosphorylation at Thr-514 by GSK3B abolishes tubulin-binding leading to destabilization of microtubule assembly in axons and neurodegeneration (By similarity). Phosphorylation by DYRK2 at Ser-522 is required for subsequent phosphorylation by GSK3B. [UniProt]
Cellular Localization	Cytoplasm, cytosol. Cytoplasm, cytoskeleton. Membrane. Note=Tightly but non-covalently associated with membranes. [UniProt]

Images



ARG40852 anti-DPYSL2 / CRMP2 phospho (Thr555) antibody [M539] WB image

Western blot: PC-12 cells stimulated with calyculin A (100 nM) for 30 min. The blots were untreated (left) or treated with lambda phosphatase (right) and stained with ARG40852 anti-DPYSL2 / CRMP2 phospho (Thr555) antibody [M539].