



CRMP-2 (phospho Thr514) Polyclonal Antibody

Catalog No	YP-Ab-12653
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	DPYSL2
Immunogen	The antiserum was produced against synthesized peptide derived from human DRP-2 around the phosphorylation site of Thr514. AA range:480-529
Specificity	Phospho-CRMP-2 (T514) Polyclonal Antibody detects endogenous levels of CRMP-2 protein only when phosphorylated at T514.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Collapsin response mediator protein 2;Collapsin response mediator protein; Collapsin response mediator protein hCRMP 2;CRAM;CRMP 2;CRMP-2; CRMP2;DHPRP 2;DHPRP2;Dihydropyrimidinase 2;Dihydropyrimidinase like 2; Dihydropyrimidinase like 2 long form;Dihydropyrimidinase related protein 2; Dihydropyrimidinase-related protein 2;DPYL 2;DPYL2;DPYL2_HUMAN;DPYSL 2;Dpysl2;DRP-2;DRP2;Musunc 33;Musunc33;N2A3;TOAD 64;TOAD64;ULIP 2 protein;ULIP-2;Ulip2;Unc-33-like phosphoprotein 2
Observed Band	65kD
Calculated Molecular Weight	65kD
Cell Pathway	Cytoplasm, cytosol . Cytoplasm, cytoskeleton . Membrane . Tightly but non-covalently associated with membranes.
Tissue Specificity	Ubiquitous.
Function	function:Necessary for signaling by class 3 semaphorins and subsequent remodeling of the cytoskeleton. Plays a role in axon guidance, neuronal growth cone collapse and cell migration.,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., similarity:Belongs to the DHOase family. Hydantoinase/dihydropyrimidinase subfamily.,subunit:Homotetramer, and heterotetramer with CRMP1, DPYSL3, DPYSL4 or DPYSL5 (By similarity). Interacts through its C-terminus with the C-terminus of CYFIP1/SRA1. Interacts with HTR4.,tissue specificity:Ubiquitous.,

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],

matters needing attention

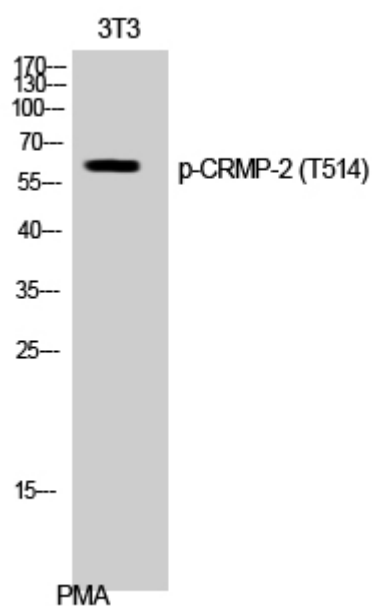
Avoid repeated freezing and thawing!

Usage suggestions

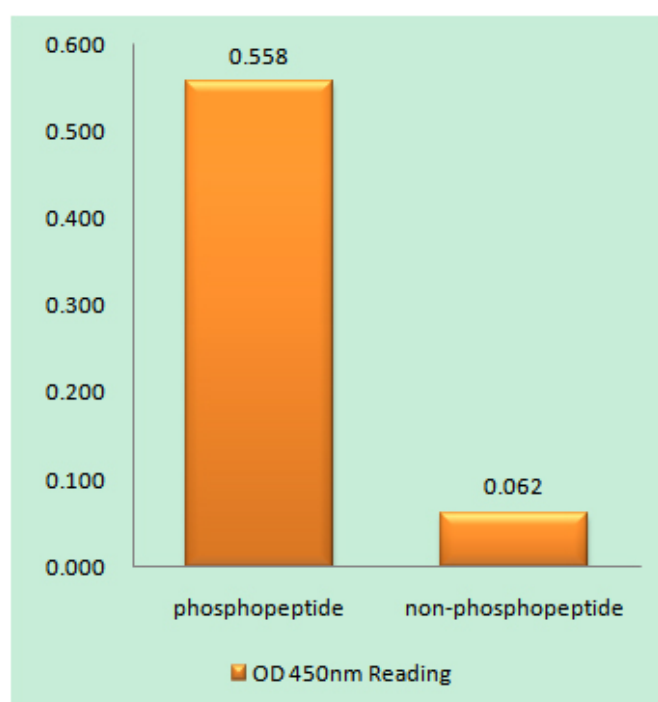
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Products Images



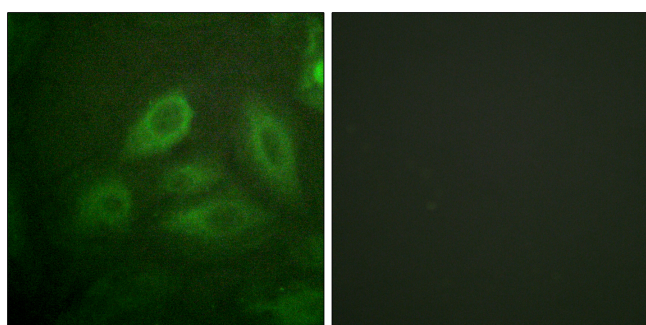
Western Blot analysis of 3T3 cells using
Phospho-CRMP-2 (T514) Polyclonal Antibody



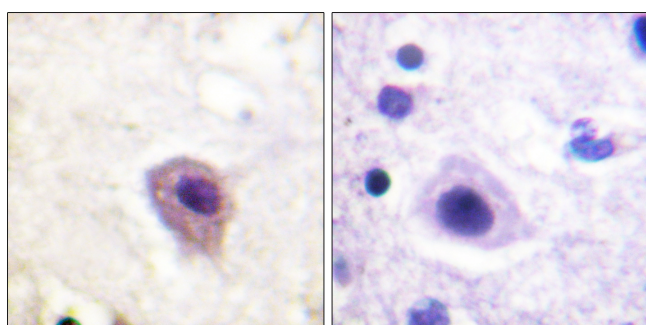
Enzyme-Linked Immunosorbent Assay
(Phospho-ELISA) for Immunogen Phosphopeptide
(Phospho-left) and Non-Phosphopeptide
(Phospho-right), using DRP-2 (Phospho-Thr514)
Antibody



Immunofluorescence analysis of HeLa cells, using
DRP-2 (Phospho-Thr514) Antibody. The picture on the
right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using DRP-2 (Phospho-Thr514) Antibody. The picture on the right is blocked with the phospho peptide.





Western blot analysis of lysates from NIH/3T3 cells treated with PMA 125ng/ml 30', using DRP-2 (Phospho-Thr514) Antibody. The lane on the right is blocked with the phospho peptide.