

CRMP-2 (phospho Thr514) Polyclonal Antibody

Catalog No: YP0947

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: CRMP-2

Fields: >>Axon guidance

Gene Name : DPYSL2

Protein Name: Dihydropyrimidinase-related protein 2

Human Gene Id: 1808

Human Swiss Prot

t Q16555

O08553

No:

Mouse Gene Id: 12934

Mouse Swiss Prot

No:

Rat Gene ld: 25416

Rat Swiss Prot No: P47942

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

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not

yet tested in other applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 65kD

Cell Pathway: Axon guidance;

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: 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.,

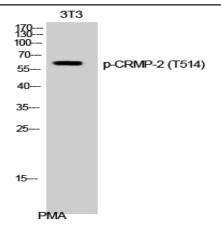
Subcellular Location:

Cytoplasm, cytosol . Cytoplasm, cytoskeleton . Membrane . Tightly but non-

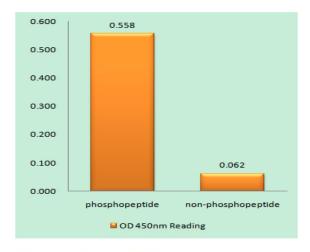
covalently associated with membranes.

Expression: Ubiquitous.

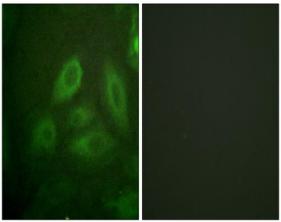
Products Images



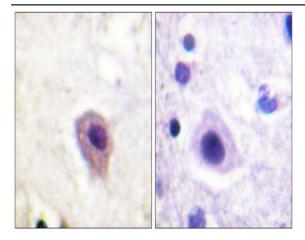
Western Blot analysis of 3T3 cells using Phospho-CRMP-2 (T514) Polyclonal Antibody



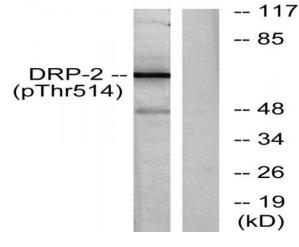
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using DRP-2 (Phospho-Thr514) Antibody



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.