



CRMP-2 (phospho Thr509) Polyclonal Antibody

Catalog No	YP-Ab-12649
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	DPYSL2
Protein Name	Dihydropyrimidinase-related protein 2
Immunogen	The antiserum was produced against synthesized peptide derived from human CRMP-2 around the phosphorylation site of Thr509. AA range:475-524
Specificity	Phospho-CRMP-2 (T509) Polyclonal Antibody detects endogenous levels of CRMP-2 protein only when phosphorylated at T509.
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	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DPYSL2; CRMP2; ULIP2; Dihydropyrimidinase-related protein 2; DRP-2; Collapsin response mediator protein 2; CRMP-2; N2A3; Unc-33-like phosphoprotein 2; ULIP-2
Observed Band	50kD
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],

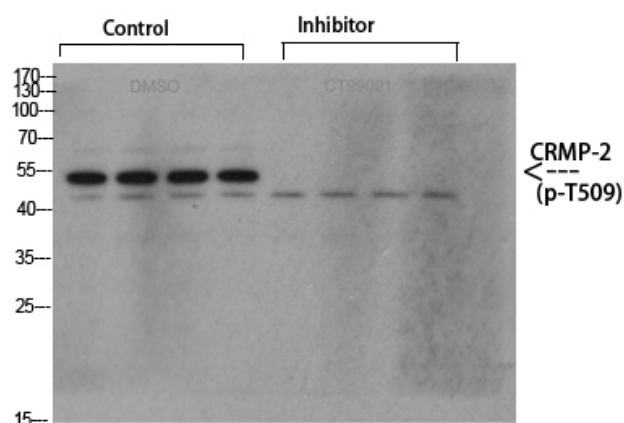
matters needing attention

Avoid repeated freezing and thawing!

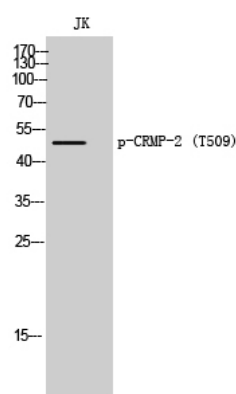
Usage suggestions

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

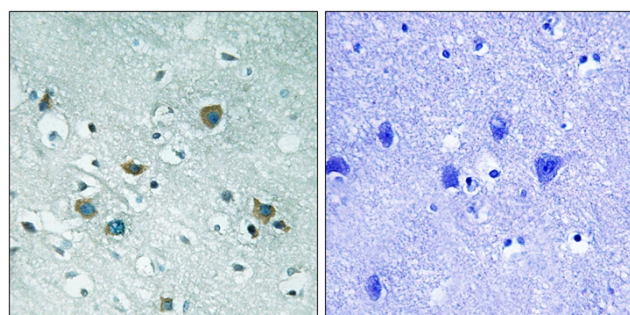
Products Images



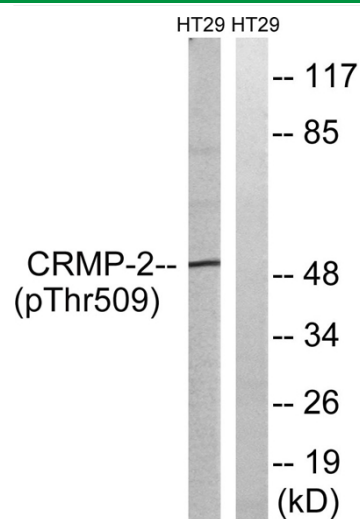
Western Blot analysis of various cells using primary antibody diluted at 1:1000 (4°C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour). Cell lysate was extracted by Minute™ Plasma Membrane Protein Isolation and Cell Fractionation Kit (SM-005, Inventbiotech, MN, USA).



Western Blot analysis of JK cells using Phospho-CRMP-2 (T509) Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using CRMP-2 (Phospho-Thr509) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HT29 cells treated with heat shock, using CRMP-2 (Phospho-Thr509) Antibody. The lane on the right is blocked with the phospho peptide.