

Rabbit CRMP2 Polyclonal Antibody | anti-CRMP2 antibody

CRMP2 (Thr-555), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71605	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

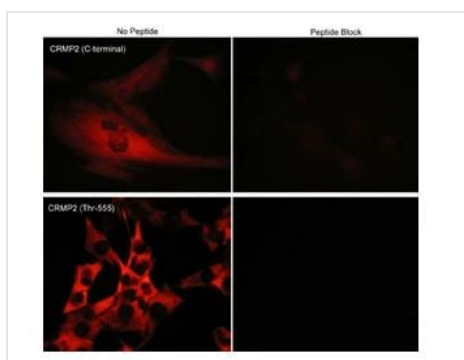
PRODUCT SYNONYMS

CRMP2; Polyclonal Antibody; CRMP2 (Thr-555); phospho-specific Antibody; phospho-specific; CRMP2 T555; anti-CRMP2 antibody

PRODUCT SPECIFICATIONS

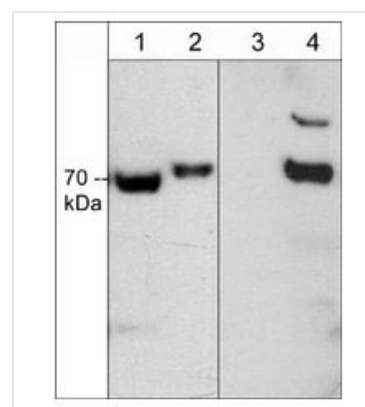
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was cross-adsorbed to unphosphorylated CRMP2 (Thr-555) before affinity purification using phospho-CRMP2 (Thr-555) peptide (without carrier). The antibody detects a 70kDa* protein corresponding to CRMP2 on immunoblots of rat PC12 or mouse C2C12 cells treated with calyculin A. This reactivity can be specifically blocked using phospho-CRMP2 (Thr-555) peptide (CX2255).
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-CRMP2 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	Phospho-CRMP2 (Thr-555) synthetic peptide (coupled to carrier protein) corresponding to amino acids surrounding Thr-555 in human CRMP2. This sequence is conserved in rat and mouse CRMP2 and the phospho-site is not conserved in other CRMP family members.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of phosphorylated CRMP2 in mouse C2C12 cells. The cells were probed with CRMP2 (C-terminal region) and CRMP2 (Thr-555) rabbit polyclonal antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3. The antibodies were used in the absence (left) or presence (right) of their respective blocking peptide (CX2165 or CX2255).



WB (Western Blot)

Western blot of rat PC12 cells untreated (lanes 1 & 3) or treated with calyculin A (lanes 2 & 4). The blot was probed with anti-CRMP2 (C-terminal Region) antibody (lanes 1 & 2) or anti-CRMP2 (Thr-555) antibody (lanes 3 & 4).

ADDITIONAL INFORMATION

Related Product Information for anti-CRMP2 antibody	CRMP2 (CRMP-62, TOAD-64, DRP-2) is a microtubule associated protein involved in neuron development and axon pathfinding. CRMP2 binds to tubulin heterodimers and promotes microtubule assembly. The overexpression of CRMP2 facilitates the rate of axonal growth, whereas the mutated form that lacks activity toward the microtubule assembly inhibits axonal growth in a dominant negative manner. Phosphorylation of CRMP2 regulates its activity and this type of regulation has been implicated in axon growth cone collapse induced by several repulsive cues. Cdk5 and GSK3 phosphorylation occurs downstream of the repulsive cue, Sema-3A. Several residues in CRMP2 are phosphorylated by GSK3 (Ser-518, Thr-514, and Thr-509), and a priming site (Ser-522). These sites are conserved in human CRMP1 and CRMP4, but not in CRMP3 or CRMP5. The priming site is also phosphorylated by Cdk5. In contrast, ROCK phosphorylates Thr-555 leading to LPA, MAG, or Ephrin-A5 mediated growth cone collapse. Thus, CRMP2 phosphorylation status may be a critical element of pathways that control axon pathfinding.
References	Cole, A.R. et al. (2006) J. Biol. Chem. 281(24):16591. Mimura, F. et al. (2006) J. Biol. Chem. 281(23):15970. Arimura, N. et al. (2005) Mol. Cell. Biol. 25(22):9973. Uchida, Y. et al. (2005) Genes to Cells 10:165. Arimura, N. et al. (2000) J. Biol. Chem. 275(31):23973

NCBI AND UNIPROT INFORMATION

NCBI GI #	308818195
NCBI GeneID	1808
NCBI Accession #	NP_001184222.1
NCBI GenBank Nucleotide #	NM_001197293.2
UniProt Accession #	Q16555; O00424; A8K5H2; B4DR31; D3DSS7
Molecular Weight	62,294 Da
NCBI Official Full Name	dihydropyrimidinase-related protein 2 isoform 1
NCBI Official Synonym Full Names	dihydropyrimidinase-like 2
NCBI Official Symbol	DPYSL2
NCBI Official Synonym Symbols	DRP2; N2A3; CRMP2; DRP-2; ULIP2; CRMP-2; DHPRP2; ULIP-2
NCBI Protein Information	dihydropyrimidinase-related protein 2; unc-33-like phosphoprotein 2; collapsin response mediator protein hCRMP-2
UniProt Protein Name	Dihydropyrimidinase-related protein 2
UniProt Gene Name	DPYSL2
UniProt Synonym Gene Names	CRMP2; ULIP2; DRP-2; CRMP-2; ULIP-2
UniProt Entry Name	DPYL2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/crmp2-antibody-immunocytochemistry-western-blot-elisa/71605>