



## Rabbit Anti-Phospho-CRMP2 (Thr514) antibody

SL3068R

<b>Product Name:</b>	Phospho-CRMP2 (Thr514)
<b>Chinese Name:</b>	磷酸化二氢嘧啶酶样2抗体
<b>Alias:</b>	CRMP2 (phospho T514); p-CRMP2 (phospho T514); CRMP2 (phospho T514); p-CRMP2 (phospho T514); CRMP2 (phospho T514); CRMP-2(phospho Thr514); p-CRMP2(Thr514); Collapsin response mediator protein 2; Collapsin response mediator protein hCRMP 2; CRAM; CRMP 2; CRMP-2; CRMP2; DHPRP 2; DHPRP2; Dihydropyrimidinase 2; Dihydropyrimidinase 2; Dihydropyrimidinase like 2; Dihydropyrimidinase like 2 long form; Dihydropyrimidinase related protein 2; Dihydropyrimidinase-related protein 2; DPYL 2; DPYL2; DPYL3_HUMAN; DPYSL 2; Dpysl2; DRP 2; DRP-2; DRP2; Musunc 33; Musunc33; N2A3; TOAD 64; TOAD64; ULIP 2 protein; ULIP-2; Ulip2; Unc-33-like phosphoprotein 2.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/testIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	62kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated Synthesised phosphopeptide derived from human CRMP-2 around the phosphorylation site of Thr514:TV(p-T)PA
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>Collapsin response mediator proteins (CRMPs) are cytosolic phosphoproteins involved in neuronal differentiation and axonal guidance. CRMP2 was previously shown to mediate the repulsive effect of Sema3A on axons and to participate in axonal specification. The CRMPs appear to play a complex role in axon growth as well as microtubule dynamics and axon induction. CRMPs localize to the lamellipodia and filopodia of axonal growth cones, suggesting a role in axon guidance. Moreover, CRMP2 is upregulated after axotomy, and appears to increase the formation of axon-type processes from hippocampal neurons. CRMP2 has been reported to bind tubulin dimers directly and modulate microtubule assembly. CRMPs have also been implicated in the pathogenesis of a paraneoplastic neurologic syndrome. Interaction studies have implicated phospholipase D2 (PLD2), the cytosolic tyrosine kinase Fes, and intersectin in CRMP function. Hyperphosphorylation of CRMP2 is an early event in the progression of Alzheimer's disease.</p> <p><b>Function:</b> 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 (By similarity).</p> <p><b>Subunit:</b> Homotetramer, and heterotetramer with CRMP1, DPYSL2, DPYSL4 or DPYSL5 (By similarity). Interacts with synaptic vesicle protein 2 and SH3A domain of intersectin (By similarity).</p> <p><b>Subcellular Location:</b> Cytoplasm. Cell projection, growth cone. Note=Colocalizes with synaptic vesicle protein 2 in the central region of the growth cone.</p> <p><b>Tissue Specificity:</b> Mainly expressed in heart and skeletal muscle. Also strongly expressed in fetal brain and spinal cord.</p> <p><b>Post-translational modifications:</b> Phosphorylation on Ser-522 by DYRK2 promotes subsequent phosphorylation on Thr-509, Thr-514 and Ser-518 by GSK3.</p> <p><b>Similarity:</b> Belongs to the DHOase family.</p> <p><b>SWISS:</b> Q16555</p> <p><b>Gene ID:</b></p>

1808

**Database links:**

[Entrez Gene: 1808](#)Human

[Entrez Gene: 12934](#)Mouse

[Entrez Gene: 25416](#)Rat

[Omim: 602463](#)Human

[SwissProt: Q16555](#)Human

[SwissProt: O08553](#)Mouse

[SwissProt: P47942](#)Rat

[Unigene: 173381](#)Human

[Unigene: 352648](#)Mouse

[Unigene: 475100](#)Mouse

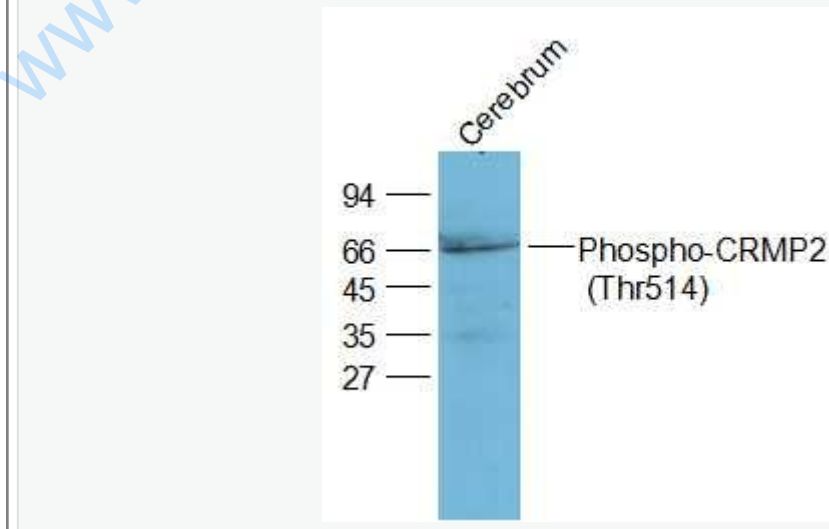
[Unigene: 2889](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

CRMP2是一种脑特异性蛋白, 对于轴突生长和轴突-树突发育起到很重要的作用, CRMP2通过与微管蛋白二聚体结合并促进微管的组装来调控轴突的生长和分支。

**Picture:**



Sample:

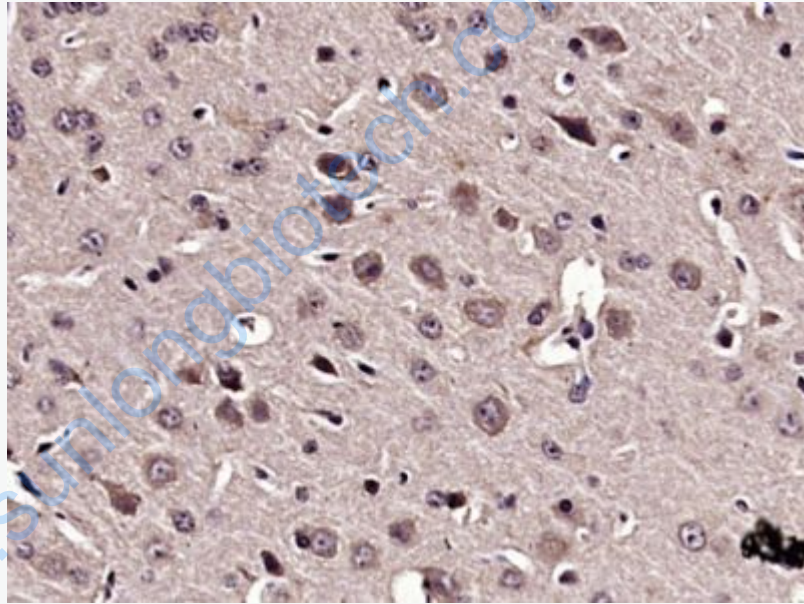
Cerebrum (Rat) Lysate at 40 ug

Primary: Anti-Phospho-CRMP2 (Thr514) (SL3068R) at 1/2000 dilution

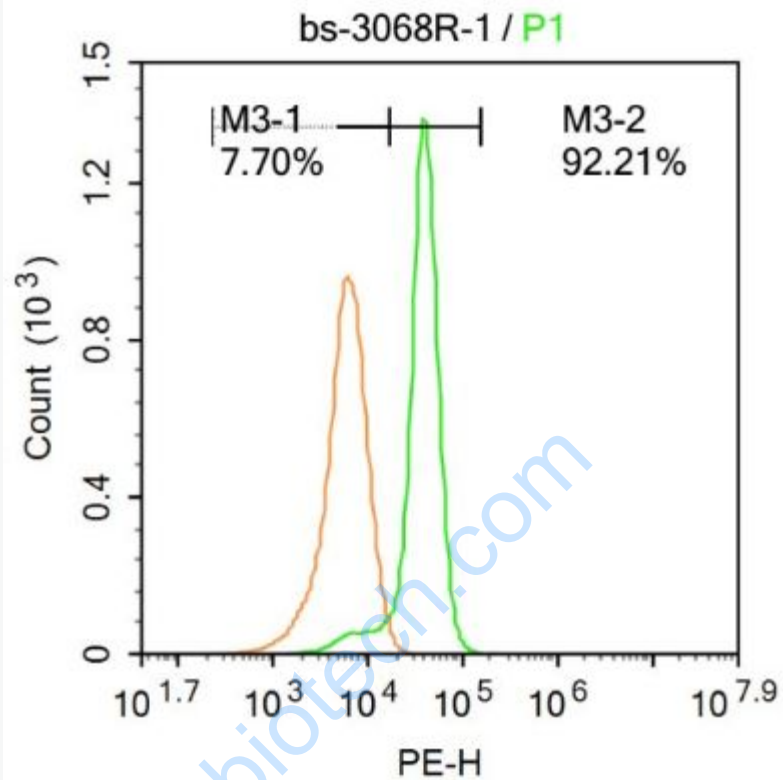
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 62 kD

Observed band size: 65 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (Phospho-CRMP2 (Thr514)) Polyclonal Antibody, Unconjugated (SL3068R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.



Blank control: Molt-4.

Primary Antibody (green line): Rabbit Anti-Phospho-CRMP2 (Thr514) antibody (SL3068R).

Dilution: 1 µg / 10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1 µg / test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 20% PBST for 20 min at -20°C. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room

temperature .Cells stained with Primary Antibody for 30 min at room temperature.  
The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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