bs-3068R **[Primary Antibody]**

phospho-CRMP2 (Thr514) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 1808 **SWISS:** Q16555

Target: CRMP2 (Thr514)

Immunogen: KLH conjugated Synthesised phosphopeptide derived from human CRMP-2 around the phosphorylation site of Thr514: TV(p-T)PA.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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.

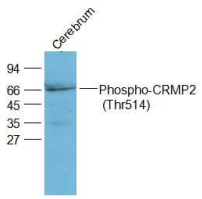
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Cow, Chicken, Dog, Horse)

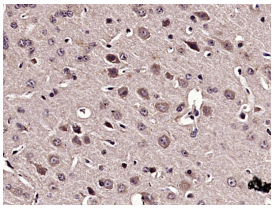
Predicted MW.: 62 kDa

Subcellular Location: Cytoplasm

VALIDATION IMAGES



Sample: Cerebrum (Rat) Lysate at 40 ug Primary: Anti-Phospho-CRMP2 (Thr514) (bs-3068R) 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 (bs-3068R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.

SELECTED CITATIONS

- **[IF=3.74]** Zheng, Jian, et al. "Lithium posttreatment confers neuroprotection through glycogen synthase kinase-3β inhibition in intracerebral hemorrhage rats." Journal of Neurosurgery (2016): 1-9. WB ;="Rat". 27739937

- **[IF=3.04]** Liu Z et al. The neuroprotective effect of lithium chloride on cognitive impairment through glycogen synthase kinase-3β inhibition in intracerebral hemorrhage rats.(2018) Eur J Pharmacol. 2018 Dec 5;840:50-59. WB ;Rat. 30336136