

# RIM-BP2 (P-13): sc-169182

## BACKGROUND

RIMS-binding proteins (RIM-BPs) serve as adaptors during vesicle fusion and release by forming links between synaptic-vesicle fusion apparatuses and calcium channels. Specifically, RIM-BP2 (RIMS binding protein 2), also known as RBP2, is a 1,052 amino acid protein that links L-type Ca<sup>2+</sup> CP  $\alpha$ 1D, N-type Ca<sup>2+</sup> CP  $\alpha$ 1B, Rim1 and Rim2 during synaptic transmission. RIM-BP2 contains three fibronectin type-III domains and three SH3 domains, which are used to mediate binding to a proline-rich motifs. Existing as three alternatively spliced isoforms, RIM-BP2 is encoded by a gene that maps to human chromosome 12q24.33 and mouse chromosome 5 G1.3.

## REFERENCES

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3. Kaeser, P.S. and Südhof, T.C. 2005. RIM function in short- and long-term synaptic plasticity. Biochem. Soc. Trans. 33 (Pt. 6): 1345-1349.
4. Mittelstaedt, T. and Schoch, S. 2007. Structure and evolution of RIM-BP genes: identification of a novel family member. Gene 403: 70-79.
5. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 611602. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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## CHROMOSOMAL LOCATION

Genetic locus: RIMBP2 (human) mapping to 12q24.33; Rimb2 (mouse) mapping to 5 G1.3.

## SOURCE

RIM-BP2 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RIM-BP2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169182 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

RIM-BP2 (P-13) is recommended for detection of RIM-BP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with RIM-BP3 .

Suitable for use as control antibody for RIM-BP2 siRNA (h): sc-96212, RIM-BP2 siRNA (m): sc-152962, RIM-BP2 shRNA Plasmid (h): sc-96212-SH, RIM-BP2 shRNA Plasmid (m): sc-152962-SH, RIM-BP2 shRNA (h) Lentiviral Particles: sc-96212-V and RIM-BP2 shRNA (m) Lentiviral Particles: sc-152962-V.

Molecular Weight of RIM-BP2 isoforms: 116/70/21 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.