

# RGPD (S-17): sc-240825

## BACKGROUND

The eight RGPD genes resulted from duplications of a region of human chromosome 2 containing the Ran BP-2 and GCC2 genes. This region, clustered close to the chromosome 2 centromere, undergoes a series of genetic rearrangements, including an inversion of the entire region, loss of 3-prime exons from the Ran BP-2 gene, partial deletion of Ran BP-2 exon 20, and a translocation that resulted in accretion of several 3' exons from the GCC2 gene. Like other RGPD proteins, the deduced RGPD1 protein exceeds 1,700 amino acids. Most of the RGPD1 sequence is homologous to regions of Ran BP-2, except for the C terminus, which includes the GRIP domain from GCC2. The eight RGPD genes map to human chromosome 2p11.2-q13 and were named according to their physical order. RGPD2 is the more centromeric of the two RGPD genes on chromosome 2p11.2.

## REFERENCES

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5. Neilson, D.E., Adams, M.D., Orr, C.M., Schelling, D.K., Eiben, R.M., Kerr, D.S., Anderson, J., Bassuk, A.G., Bye, A.M., Childs, A.M., Clarke, A., Crow, Y.J., Di Rocco, M., et al. 2009. Infection-triggered familial or recurrent cases of acute necrotizing encephalopathy caused by mutations in a component of the nuclear pore, RANBP2. *Am. J. Hum. Genet.* 84: 44-51.
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## SOURCE

RGPD (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RGPD2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-240825 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

RGPD (S-17) is recommended for detection of RGPD family members 1-8, and RANBP2 of 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).

RGPD (S-17) is also recommended for detection of RGPD family members 1-8, and RANBP2 in additional species, including canine and bovine.

Molecular Weight of RGPD: 197 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.

## STORAGE

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

## PROTOCOLS

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