

# Repulsive Guidance Molecule B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54517

## Product Information

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<b>Application</b>	WB, IHC-P, IHC-F, IF, ICC, E
<b>Primary Accession</b>	<a href="#">Q6NW40</a>
<b>Reactivity</b>	Rat, Pig, Dog, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	47547
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human RGMB
<b>Epitope Specificity</b>	58-160/437
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Cell membrane; Lipid-anchor, GPI-anchor (By similarity). Membrane raft
<b>SIMILARITY</b>	Belongs to the repulsive guidance molecule (RGM) family.
<b>SUBUNIT</b>	Homooligomer (By similarity). Interacts with DRGX (By similarity). Interacts with BMP2 and BMP4 (By similarity). Interacts with the BMP type I receptors ACVR1, BMPR1A and BMPR1B and with the BMP type II receptor ACVR2B
<b>Post-translational modifications</b>	GPI-anchored.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	The repulsive guidance molecule (RGM) family of proteins are important in the guidance of growth cones of developing neurons. They are repulsive for a group of axons, those from the temporal half of the retina. RGM have been implicated in both axonal guidance and neural tube closure but as opposed to for ephrins, semaphorins, netrins and slits, no receptor mechanism for RGM activation has been defined. Dorsal root ganglion axons do not respond to RGM but neogenin (a netrin-binding protein which can function as an RGM receptor) expression can spur RGM responsiveness. The RGM proteins are attached to the membrane by a GPI-anchor. Two members of this family, RGMa and RGMb, are expressed in the nervous system. RGMc, also known as Hemojuvelin, is a part of the signaling pathway activating hepcidin and works together with hepcidin to restrict iron absorption in the gut. Defects in the gene encoding for RGMc causes the autosomal recessive disorder juvenile hemochromatosis (JH).

## Additional Information

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<b>Gene ID</b>	285704
<b>Other Names</b>	RGM domain family member B, DRG11-responsive axonal guidance and

outgrowth of neurite, DRAGON, RGMB

<b>Dilution</b>	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

## Protein Information

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<b>Name</b>	RGMB {ECO:0000303 PubMed:19324014, ECO:0000312 HGNC:HGNC:26896}
<b>Function</b>	Member of the repulsive guidance molecule (RGM) family that contributes to the patterning of the developing nervous system (By similarity). Acts as a bone morphogenetic protein (BMP) coreceptor that potentiates BMP signaling (By similarity). Promotes neuronal adhesion (By similarity). May inhibit neurite outgrowth.
<b>Cellular Location</b>	Cell membrane {ECO:0000250 UniProtKB:Q7TQ33}; Lipid-anchor, GPI-anchor {ECO:0000250 UniProtKB:Q7TQ33}. Membrane raft {ECO:0000250 UniProtKB:Q7TQ33}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.