

Repulsive Guidance Molecule B Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54517

Specification

Repulsive Guidance Molecule B Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q6NW40
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RGMB
Epitope Specificity	58-160/437
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Lipid-anchor, GPI-anchor (By similarity). Membrane raft
SIMILARITY	Belongs to the repulsive guidance molecule (RGM) family.
SUBUNIT	Homoooligomer (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
Post-translational modifications	GPI-anchored.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

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).

Repulsive Guidance Molecule B Polyclonal Antibody - Additional Information

Gene ID 285704

Other Names

RGM domain family member B, DRG11-responsive axonal guidance and outgrowth of neurite, DRAGON, RGMB

Dilution

WB~~1:1000<br /\>IHC-P~~N/A<br /\>IHC-F~~N/A<br /\>IF~~1:50~200<br /\>ICC~~N/A<br /\>E~~N/A

Storage

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.

Repulsive Guidance Molecule B Polyclonal Antibody - Protein Information

Name RGMB {ECO:0000303|PubMed:19324014, ECO:0000312|HGNC:HGNC:26896}

Function

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.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q7TQ33}; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:Q7TQ33}. Membrane raft {ECO:0000250|UniProtKB:Q7TQ33}

Repulsive Guidance Molecule B Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Repulsive Guidance Molecule B Polyclonal Antibody - Images