SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-Repulsive Guidance Molecule B antibody

Catalog Number: SL11474R

FOR RESEARCH USE ONLY

[DATASHEET]

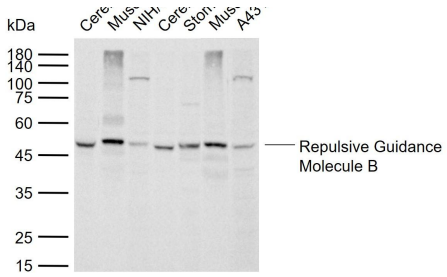
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Repulsive Guidance Molecule B
Immunogen:	KLH conjugated synthetic peptide derived from human RGMB: 58-160/437
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human, Mouse, Rat, (predicted: Dog, Pig, Cow, Horse)
Predicted MW.:	40kDa
Subcellular Location:	The cell membrane
Background:	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).

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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	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. **Subunit:** 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 **Subcellular Location:** Cell membrane; Lipid-anchor, GPI-anchor (By similarity). Membrane raft **Post-translational modifications:** GPI-anchored. **Similarity:** Belongs to the repulsive guidance molecule (RGM) family. **Database links:** **Entrez Gene:** 285704 Human **Entrez Gene:** 68799 Mouse Omim: 612687 Human **SwissProt:** Q6NW40 Human **SwissProt:** Q7TQ33 Mouse **Unigene:** 526902 Human **Unigene:** 293466 Mouse

[VALIDATION IMAGES]



Sample:
Lane 1: Mouse Cerebrum tissue lysates
Lane 2: Mouse Muscle tissue lysates
Lane 3: Mouse NIH/3T3 cell lysates
Lane 4: Rat Cerebrum tissue lysates
Lane 5: Rat Stomach tissue lysates
Lane 6: Rat Muscle tissue lysates
Lane 7: Human A431 cell lysates
Primary: Anti-Repulsive Guidance Molecule B (SL11474R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 40 kDa
Observed band size: 48 kDa

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