

RGMA Antibody
Rabbit mAb
Catalog # AP92716

Specification

RGMA Antibody - Product Information

Application	WB, ICC
Primary Accession	Q96B86
Reactivity	Rat
Clonality	Monoclonal
Other Names	Repulsive guidance molecule A; RGM; RGM domain family member A; RGMA;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	49347 Da

RGMA Antibody - Additional Information

Dilution	WB~~1:1000 ICC~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human RGMA
Description	Member of the repulsive guidance molecule (RGM) family that performs several functions in the developing and adult nervous system. Regulates cephalic neural tube closure, inhibits neurite outgrowth and cortical neuron branching, and the formation of mature synapses. Binding to its receptor NEO1/neogenin induces activation of RHOA-ROCK1/Rho-kinase signaling pathway through UNC5B-ARHGEF12/LARG-PTK2/FAK1 cascade, leading to collapse of the neuronal growth cone and neurite outgrowth inhibition. Furthermore, RGMA binding to NEO1/neogenin leads to HRAS inactivation by influencing HRAS-PTK2/FAK1-AKT1 pathway. It also functions as a bone morphogenetic protein (BMP) coreceptor that may signal through SMAD1, SMAD5, and SMAD8.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

RGMA Antibody - Protein Information

Name RGMA ([HGNC:30308](#))

Synonyms RGM

Function

Member of the repulsive guidance molecule (RGM) family that performs several functions in the developing and adult nervous system. Regulates cephalic neural tube closure, inhibits neurite outgrowth and cortical neuron branching, and the formation of mature synapses. Binding to its receptor NEO1/neogenin induces activation of RHOA- ROCK1/Rho-kinase signaling pathway through UNC5B-ARHGEF12/LARG- PTK2/FAK1 cascade, leading to collapse of the neuronal growth cone and neurite outgrowth inhibition. Furthermore, RGMA binding to NEO1/neogenin leads to HRAS inactivation by influencing HRAS-PTK2/FAK1- AKT1 pathway. It also functions as a bone morphogenetic protein (BMP) coreceptor that may signal through SMAD1, SMAD5, and SMAD8.

Cellular Location

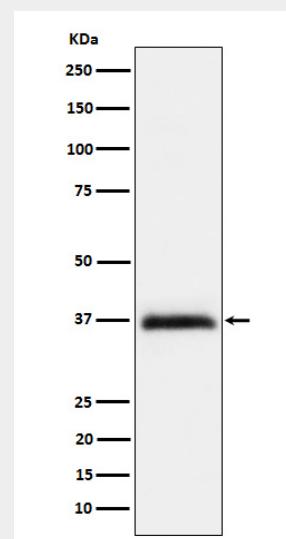
Cell membrane; Lipid-anchor, GPI- anchor

RGMA 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](#)

RGMA Antibody - Images



Western blot analysis of RGMA expression in HeLa cell lysate.

