

RGMA Polyclonal Antibody

Catalog number: 12387-1-AP

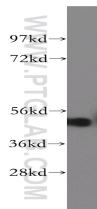
Size: 33 µg/150 µl

Source: Rabbit

Isotype: IgG

Synonyms:

RGMA; RGM



mouse testis tissue were subjected to SDS PAGE followed by western blot with 12387-1-AP(RGMA Antibody) at dilution of 1:600

Background

RGMA, also named as RGM, is a member of the repulsive guidance molecule (RGM) family that performs several functions in the developing and adult nervous system. It regulates cephalic neural tube closure, inhibits neurite outgrowth and cortical neuron branching, and the formation of mature synapses. RGMA binding to its receptor NEO1/neogenin induces activation of RHOA-ROCK1/Rho-kinase signaling pathway through UNC5B-ARHGEF12/LARG-PTK2 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 HRAS1-PTK2-AKT1 pathway. It also functions as a bone morphogenetic protein (BMP) coreceptor that may signal through SMAD1, SMAD5, and SMAD8. RGMA is a molecular target for neuroprotection in retinal pathologies(PMID: 20457227). the frequent genetic and epigenetic inactivation of RGMA in CRCs and adenomas along with its in vitro function collectively support its role as a tumor suppressor in colon cells(PMID:19303019).

Applications

Tested applications:	ELISA, WB
Species specificity:	Human, mouse, rat; other species not tested.
Positive WB detected in:	Mouse testis tissue
Calculated RGMA MW:	450aa,49kd
Observed RGMA MW:	49kd
Recommended dilution:	WB: 1:200-1:2000

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation, FC = Flow cytometry

Immunogen information

Immunogen:	Ag3058
GenBank accession number:	BC015886
Gene ID (NCBI):	56963
Full name:	RGM domain family, member A

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.