



Mouse RGMA peptide (DAG-P1937)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen 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 HRAS1-PTK2/FAK1-AKT1 pathway. It also functions as a bone morphogenetic protein (BMP) coreceptor that may signal through SMAD1, SMAD5, and SMAD8.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the repulsive guidance molecule (RGM) family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	Rgma repulsive guidance molecule family member A [Mus musculus (house mouse)]
Official Symbol	RGMA
Synonyms	RGMA; repulsive guidance molecule family member A; BC059072; C230063O06; repulsive guidance molecule A; RGM domain family, member A;
Entrez Gene ID	244058

mRNA Refseq	NM_177740.5
Protein Refseq	NP_808408.2
UniProt ID	Q6PCX7
Chromosome Location	7 D1; 7
Pathway	Axon guidance, organism-specific biosystem; Developmental Biology, organism-specific biosystem; Netrin-1 signaling, organism-specific biosystem; Spinal Cord Injury, organism-specific biosystem;
Function	coreceptor activity; protein binding;