

Recombinant Human RGMA Protein (169-424 aa), His-MBP-tagged

Cat. No. RGMA-2748H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human RGMA Protein (169-424 aa) is produced by Baculovirus expression system. This protein is fused with a MBP tag at the N-terminal and a 6xHis tag at the C-terminal. Research Area: Neuroscience. Protein Description: Full Length of Mature Protein.
Species	Human
Source	Insect Cells
ProteinLength	169-424 aa
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.
Form	Tris-based buffer, 50% glycerol

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Molecular Mass	72.5 kDa
AA Sequence	PHLRTFTDRFQTCKVQGAWPLIDNNYLVQVTNTPVLPGSAATATSKLTIIFKNFQEC VDQKVYQAEMDELPAAAFVDGSKNGGDKHGANSKITEKVSGQHVEIQAKYIGTTIV RQVGRYLTFVRMPPEEVVNAVEDWDSQGLYLCLRGCPNQQIDFQAFHTNAEGTG ARRLAAASPAPTAPETFPYETAVAKCKEKL PVEDLYYQACVFDLLTTGDVNFTLAAY YAL EDVKMLHSNKDKLHLYERTRDLP GRA
Purity	> 85% as determined by SDS-PAGE.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20 centigrade/-80 centigrade. The shelf life of lyophilized form is 12 months at -20 centigrade/-80 centigrade.
Concentration	A hardcopy of COA will be sent along with the products. Please refer to it for detailed information.

GENE INFORMATION

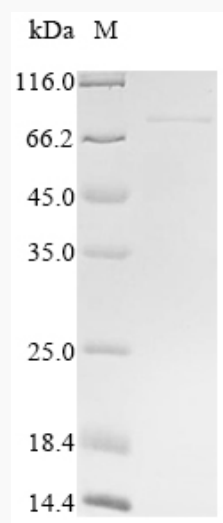
Gene Name	RGMA RGM domain family, member A [Homo sapiens]
Official Symbol	RGMA
Synonyms	RGMA; RGM domain family, member A; repulsive guidance molecule A; RGM;
Gene ID	56963

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mRNA Refseq	NM_001166283
Protein Refseq	NP_001159755
MIM	607362
UniProt ID	Q96B86



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

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