



# Recombinant Human Repulsive guidance molecule A (RGMA)

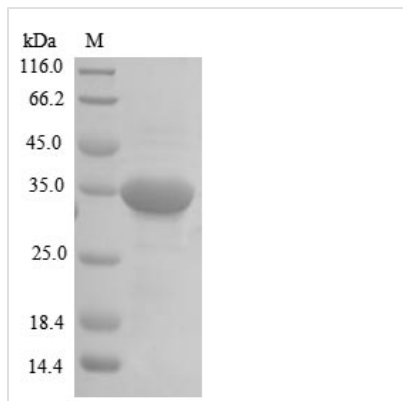
<b>Product Code</b>	CSB-EP836186HU
<b>Relevance</b>	Member of the repulsive guidance molecule (RGM) family that performs several functions in the developing and adult nervous system. Regulates cephalic neural tube closure, inhibits neurite outgrowth and cortical neuron branching, and the formation of 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.
<b>Abbreviation</b>	RGMA
<b>Storage</b>	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°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q96B86
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 85% as determined by SDS-PAGE.
<b>Sequence</b>	PHLRTFTDRFQTCKVQGAWPLIDNNYLVQVTNTPVLPGSAATATSKLTIIFKN FQECVDQKVYQAEMDELPAAFVDGSKNGGDKHGANSKITEKVSQGQHVEIQA KYIGTTIVVRQVGRYLTFVRMPPEEVVNAVEDWDSQGLYLCLRGCPNLNQQIDF QAFHTNAEGTGARRLAAASPAPTAPETFPYETAVAKCKEKLPEVDLYYQACVF DLLTTGDVNFTLAAYYALVDKMLHSNKDKLHLYDRTRDLPGRA
<b>Lead Time</b>	3-7 business days
<b>Research Area</b>	Neuroscience
<b>Source</b>	E.coli
<b>Gene Names</b>	RGMA
<b>Protein Names</b>	RGM domain family member A RGM
<b>Expression Region</b>	169-424aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 10xHis-tagged and C-terminal Myc-tagged
<b>Mol. Weight</b>	35.5 kDa



## Protein Description

### Full Length of Mature Protein

#### Image



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

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.