

Datasheet for ABIN7581951 **anti-RGMA antibody (Extracellular)**



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Overview

Quantity:	50 µL
Target:	RGMA
Binding Specificity:	AA 138-154, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RGMA antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Live Cell Imaging (LCI), Flow Cytometry (FACS)

Product Details

Purpose:	A Rabbit polyclonal antibody to RGMA (extracellular).
Immunogen:	(C)ERSDSPEI(S)HYEKSFSHK, corresponding to amino acid residues 138 - 154 of mouse RGMA
Sequence:	(C)ERSDSPEI(S)HYEKSFSHK
Isotype:	IgG
Specificity:	Extracellular, N-terminus (pro-domain).
Predicted Reactivity:	Mouse,human,rat - 16 out of 17 amino acid identical
Characteristics:	Anti-RGMA (extracellular) Antibody (ABIN7581951) is a highly specific antibody directed against an extracellular epitope of the mouse protein. The antibody can be used in western blot, immunohistochemistry and flow cytometry applications. It has been designed to recognize

Product Details

RGMA from mouse, rat and human samples.

Purification: Affinity purified on immobilized antigen.

Target Details

Target: RGMA

Alternative Name: RGMA ([RGMA Products](#))

Background: Repulsive Guidance Molecule A, RGM Domain Family Member A, Repulsive Guidance Molecule BMP Co-Receptor A, RGMa, Repulsive Guidance Molecule A (RGMA) is a member of the RGM family, which also includes RGMb (DRAGON) and RGMc (hemojuvelin). It is a glycosylphosphatidylinositol (GPI)-anchored protein characterized by a von Willebrand factor type D domain and a GPI-anchor, facilitating membrane association and soluble forms^{1,2}. This dual functional nature enables RGMA to act both as a localized, membrane-bound signal and as a long-range soluble signaling molecule, expanding its versatility in biological processes³. RGMA plays a critical role in axonal guidance, neuronal differentiation, and survival, primarily by interacting with the receptor neogenin. This interaction also regulates apoptosis via Akt pathway dephosphorylation. RGMA acts as a Bone Morphogenetic Protein (BMP) co-receptor, enhancing Smad-dependent signaling pathways^{2,3}. It is expressed in the central nervous system (CNS), particularly in retinal ganglion cells, midbrain dopaminergic neurons, and the spinal cord, with roles extending from embryonic development to adult neuroplasticity^{1,3,4}. RGMA is implicated in several biological processes, including axonal regeneration and inhibition, neuronal survival, and inflammatory responses. Pathological upregulation of RGMA has been linked to neurodegenerative disorders like multiple sclerosis (MS) and Parkinson's disease. In MS, RGMA inhibits axonal regeneration, while in Parkinson's, it contributes to dopaminergic neuron degeneration^{1,4,5}. Research areas benefiting from RGMA immunodetection include neuroregeneration, CNS repair, and therapeutic strategies for neurodegenerative diseases^{4,5}.

Gene ID: 244058

UniProt: [Q6PCX7](#)

Pathways: [Tube Formation](#)

Application Details

Application Notes: Antigen preadsorption control: 1 µg peptide per 1 µg antibody

Application Details

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).