

# Rabbit Anti-RGMC/Repulsive Guidance Molecule C antibody

# SL11475R

Product Name:	RGMC/Repulsive Guidance Molecule C
Chinese Name:	反义导向分子RGMC抗体
Alias:	DL M; Haemojuvelin; HEMOCHROMATOSIS; HEMOCHROMATOSIS DUE TO DEFECT IN HEMOJUVELIN; HEMOCHROMATOSIS DUE TO DEFECT IN HEPCIDIN ANTIMICROBIAL PEPTIDE; HEMOCHROMATOSIS JUVENILE; Hemochromatosis type 2 (juvenile); Hemochromatosis type 2; Hemochromatosis type 2 protein; Hemochromatosis type 2 protein homolog; HEMOCHROMATOSIS, TYPE 2A; HEMOCHROMATOSIS, TYPE 2B; Hemojuvelin; HFE 2; Hfe2; HFE2A; HJV; JH; Juvenile; MGC23953; Repulsive guidance molecule c; RGM C; RGM domain family member C; RGMC; RGMC_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Cow, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	39kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Repulsive Guidance Molecule C:205-255/426
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
•	PubMed PubMed

The repulsive guidance molecule (RGM) family of proteins are important in the guidance of growth cones of developing neurons. They are repulsive for a group of axons, those from the temporal half of the retina. RGM have been implicated in both axonal guidance and neural tube closure but as opposed to for ephrins, semaphorins, netrins and slits, no receptor mechanism for RGM activation has been defined. Dorsal root ganglion axons do not respond to RGM but neogenin (a netrin-binding protein which can function as an RGM receptor) expression can spur RGM responsiveness. The RGM proteins are attached to the membrane by a GPI-anchor. Two members of this family, RGMa and RGMb, are expressed in the nervous system. RGMc, also known as Hemojuvelin, is a part of the signaling pathway activating hepcidin and works together with hepcidin to restrict iron absorption in the gut. Defects in the gene encoding for RGMc causes the autosomal recessive disorder juvenile hemochromatosis (JH).

## **Function:**

Mutations in Repulsive Guidance Molecule (also known as RGM-C; HJV; hemojuvelin; Hfe2) cause juvenile hemochromatosis, a severe iron overload disease. RGM-C gene expression has been characterized in the developing mouse and found to be exclusively expressed in all striated muscle and in the myocardium.

# Subunit:

Interacts with BMP2 and BMP4. Interacts with BMPR1B. Interacts with TMPRSS6.

## **Product Detail:**

PubMed:

## **Subcellular Location:**

Cell membrane; Lipid-anchor, GPI-anchor

## Tissue Specificity:

Adult and fetal liver, heart, and skeletal muscle.

#### DISEASE:

Defects in HFE2 are the cause of hemochromatosis type 2A (HFE2A) [MIM:602390]; also known as juvenile hemochromatosis (JH). HFE2A is an early-onset autosomal recessive disorder due to severe iron overload resulting in hypogonadotrophic hypogonadism, hepatic fibrosis or cirrhosis and cardiomyopathy, occurring typically before age of 30. It is the consequence of intestinal iron hyperabsorption associated with macrophages that do not load iron. Deleterious mutations of HFE2 reduced HAMP (hepcidin) levels despite iron overload, which normally induces HAMP expression.

## Similarity:

Belongs to the repulsive guidance molecule (RGM) family.

#### **SWISS:**

O6ZVN8

# Gene ID:

148738

# Database links:

Entrez Gene: 148738Human

Entrez Gene: 69585 Mouse

Entrez Gene: 310681Rat

Omim: 608374Human

SwissProt: Q6ZVN8Human

SwissProt: Q7TQ32Mouse

SwissProt: Q8N7M5Rat

Unigene: 632436Human

# **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.