Mouse RGM-A Alexa Fluor® 594-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2458T
100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse RGM-A in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse RGM-A Cys48-Gly421 Accession # Q6PCX7
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Mouse repulsive guidance molecule (RGM-A) is a 33 kDa GPI-linked member of an expanding RGM-related family of neuronal and muscle-expressed membrane proteins (1). It is synthesized as a 454 amino acid (aa) preproprotein that contains a 47 aa signal sequence, a 122 aa N-terminal prosegment, a 258 mature region and a 27 aa C-terminal prosegment (2, 3). The N-terminal prosegment contains an RGD tripeptide and the molecule's only two potential N-linked glycosylation sites. The mature segment shows an abbreviated von Willebrand factor domain. Proteolytic processing occurs at an aspartic acid-proline bond, creating a predicted 32 kDa mature region (2). The mature region of mouse RGM-A is 93% and 87% aa identical to human and chick mature region RGM-A, respectively. When compared to mouse RGMb and c, the mature region of mouse RGM-A shows 77% and 76% aa identity, respectively (2, 3). Recombinant chick RGM has been reported to induce collapse of temporal but not nasal growth cones, and to repel temporal retinal axons *in vitro*. This suggests a role in the development of the retina-superior colliculus connection. In mice, however, this activity is not so obvious, and thus its function in this system is uncertain (3). Alternatively, in mice, RGM-A is said to be needed for neural tube closure (3). And in a mouse culture system, chick RGM-A is reported to be responsible for the layered segmentation of of entorhinal cortical projections to the hippocampus (4). The receptor for RGM is reported to be neogenin (5, 6).

PRODUCT SPECIFIC NOTICES

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