

## Rabbit anti-Human, Mouse DRAGON/RGMB Polyclonal Antibody | anti-RGMB antibody

Anti-DRAGON/RGMB Antibody

| CATALOG # | HOST   | REACTIVITY   | APPLICATIONS                                          |
|-----------|--------|--------------|-------------------------------------------------------|
| AAA125782 | Rabbit | Human, Mouse | ELISA, Flow Cytometry, Functional Assay, Western Blot |

### PRODUCT SYNONYMS

DRAGON/RGMB; Polyclonal Antibody; Anti-DRAGON/RGMB Antibody; RGMB; RGM domain family member B; DRG11-responsive axonal guidance and outgrowth of neurite; DRAGON; repulsive guidance molecule BMP co-receptor b; anti-RGMB antibody

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                            |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                     |
| Reactivity                                     | Human, Mouse                                                                                                                                                                                               |
| Clonality                                      | Polyclonal                                                                                                                                                                                                 |
| Isotype                                        | Rabbit IgG                                                                                                                                                                                                 |
| Specificity                                    | Rabbit IgG polyclonal antibody for DRAGON/RGMB detection.                                                                                                                                                  |
| Purity/Purification                            | Immunogen affinity purified.                                                                                                                                                                               |
| Form/Format                                    | Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.01mg NaN <sub>3</sub> .                                                                              |
| Applicable Applications for anti-RGMB antibody | ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)                                                                                                                                         |
| Immunogen                                      | E Coli-derived human DRAGON/RGMB recombinant protein (Position: D47-R404).                                                                                                                                 |
| Reconstitution                                 | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                       |
| Recommended Detection Systems                  | Recommended Detection Systems                                                                                                                                                                              |
| Preparation and Storage                        | Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing. |

### IMAGES



#### FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of A431 cells using anti-DRAGON/RGMB antibody (AAA125782). Overlay histogram showing A431 cells stained with AAA125782 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-DRAGON/RGMB Antibody (AAA125782, 1µg/1x10<sup>6</sup> cells) for 30 min at 20 degree C. DyLight<sup>®</sup>488 conjugated goat anti-rabbit IgG (5-10µg/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



#### WB (Western Blot)

Figure 1. Western blot analysis of DRAGON/RGMB using anti-DRAGON/RGMB antibody (AAA125782). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human PC-3 whole cell lysates Lane 2: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-DRAGON/RGMB antigen affinity purified polyclonal antibody (Catalog # AAA125782) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for DRAGON/RGMB at approximately 48KD. The expected band size for DRAGON/RGMB is at 48KD.

ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-RGMB antibody | Repulsive guidance molecule B (RGMb), also known as DRAGON (DRG11-responsive axonal guidance and outgrowth of neurite), is a bone morphogenetic protein (BMP) co-receptor of the repulsive guidance molecule family. In humans this protein is encoded by the RGMB gene. RGMB is a glycosylphosphatidylinositol (GPI)-anchored member of the repulsive guidance molecule family (see also RGMA and RGMC) and contributes to the patterning of the developing nervous system. There is a potential association between RGMs and cancer bone metastasis, as RGMs coordinate bone morphogenetic protein (BMP) signaling. RGMB may act as a negative regulator in vitro in breast cancer and prostate cancer through BMP signalling. Furthermore, aberrant expression of RGMs was indicated in breast cancer. The perturbed expression was associated with disease progression and poor prognosis. |
| References                                         | 1. Bell, C. H., Healey, E., van Erp, S., Bishop, B., Tang, C., Gilbert, R. J. C., Aricescu, A. R., Pasterkamp, R. J., Siebold, C. Structure of the repulsive guidance molecule (RGM)-neogenin signaling hub. Science 341: 77-80, 2013.<br>2. Gross, M. B. Personal Communication. Baltimore, Md. 3/20/2012.<br>3. Samad, T. A., Rebbapragada, A., Bell, E., Zhang, Y., Sidis, Y., Jeong, S. -J., Campagna, J. A., Perusini, S., Fabrizio, D. A., Schneyer, A. L., Lin, H. Y., Brivanlou, A. H., Attisano, L., Woolf, C. J. DRAGON, a bone morphogenetic protein co-receptor. J. Biol. Chem. 280: 14122-14129, 2005.                                                                                                                                                                                                                                                                            |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                   |
|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 224589135                                                                                                                                         |
| NCBI GeneID                      | 285704                                                                                                                                            |
| NCBI Accession #                 | NP_001012779                                                                                                                                      |
| NCBI GenBank Nucleotide #        | NM_001012761                                                                                                                                      |
| UniProt Accession #              | Q6NW40; Q8NC92; D6R9A0                                                                                                                            |
| Molecular Weight                 | 47,547 Da                                                                                                                                         |
| NCBI Official Full Name          | RGM domain family member B                                                                                                                        |
| NCBI Official Synonym Full Names | repulsive guidance molecule family member b                                                                                                       |
| NCBI Official Symbol             | RGMB                                                                                                                                              |
| NCBI Official Synonym Symbols    | DRAGON                                                                                                                                            |
| NCBI Protein Information         | RGM domain family member B; DRG11-responsive axonal guidance and outgrowth of neurite; RGM domain family, member B; repulsive guidance molecule B |
| UniProt Protein Name             | RGM domain family member B                                                                                                                        |
| UniProt Gene Name                | RGMB                                                                                                                                              |
| UniProt Synonym Gene Names       | DRAGON                                                                                                                                            |
| UniProt Entry Name               | RGMB_HUMAN                                                                                                                                        |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)  
Online datasheet: <https://stage.aaabiotech.com/polyclonal/dragon-rgmb-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125782>