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# Plexin B1 Rabbit pAb

Catalog # AP98383

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | O43157 |
| **Other Accession** | O43157 |
| **Reactivity** | Rat |
| **Predicted** | Pig, Human, Mouse, Rabbit, Dog |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 232298 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human Plexin B1 |
| **Epitope Specificity** | 151-250/2135 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the plexin family.Contains 3 IPT/TIG domains.Contains 1 Sema domain. |
| **SUBUNIT** | Monomer, and heterodimer with PLXNB2 after proteolytic processing. Binds RAC1 that has been activated by GTP binding. Interaction with SEMA4D promotes binding of cytoplasmic ligands. Binds PLXNA1. Interacts with ARHGEF11, ARHGEF12, ERBB2, MET, MST1R, RRAS, RHOD, RND1, NRP1 and NRP2. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | Plexin B1 is the transmembrane receptor for the class 4 semaphorin, SEMA4D. Plexin B1 activation plays a role in axon guidance, invasive growth and cell migration and has been reported to have additional roles in RHOA activation and subsequent changes of the actin cytoskeleton. |

## Additional Information

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| **Gene ID** | 5364 |
| **Other Names** | PLEXIN-B1; PLXN5; SEP; 2900002G15Rik; mKIAA0407; PLXB1_HUMAN; PLXNB1; Semaphorin receptor SEP; KIAA0407; PLXB1_MOUSE; plexin B1 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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. |

## Protein Information

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| **Name** | PLXNB1 |
| **Synonyms** | KIAA0407, PLXN5, SEP |
| **Function** | Receptor for SEMA4D (PubMed: 19843518, PubMed:20877282, PubMed:21912513). Plays a role in GABAergic synapse development (By similarity). Mediates SEMA4A- and SEMA4D-dependent inhibitory synapse development (By similarity). Plays a role in RHOA activation and subsequent changes of the actin cytoskeleton (PubMed:12196628, PubMed:15210733). Plays a role in axon guidance, invasive growth and cell migration (PubMed:12198496). |
| **Cellular Location** | [Isoform 1]: Cell membrane; Single-pass type I membrane protein [Isoform 3]: Secreted |
| **Tissue Location** | Highly expressed in fetal kidney, and at slightly lower levels in fetal brain, lung and liver |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.