

# ACVR2A Rabbit pAb

Catalog # AP96188

## Product Information

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| <b>Application</b>             | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Primary Accession</b>       | <a href="#">P27038</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Other Accession</b>         | <a href="#">P27038</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Calculated MW</b>           | 57890                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from mouse ACVR2A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Epitope Specificity</b>     | 1-100/513                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>                 | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>                  | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Buffer</b>                  | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>SIMILARITY</b>              | Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. TGFB receptor subfamily. Contains 1 protein kinase domain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>SUBUNIT</b>                 | Interacts with AIP1. Part of a complex consisting of AIP1, ACVR2A, ACVR1B and SMAD3 (By similarity).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Important Note</b>          | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Background Descriptions</b> | Members of the transforming growth factor b superfamily bind to a pair of transmembrane proteins, known as receptor types I and II, which contain serine/threonine kinases and associate to form a signaling complex (1). Activin has been shown to bind a heteromeric noncovalent complex, which consists of a type I receptor, ACTR-IA (also designated ACVRI and ALK-2) or ACTR-IB (also designated ALK-4 and SKR2), and a type II receptor, ACTR-IIA (also designated ACVR2A) or ACTR-IIB (also designated ACVR2B) (1-6). Both receptor types are highly expressed in brain (5). The activin receptor family members are thought to mediate distinct effects on gene expression, cell differentiation, and morpho- genesis in a dose dependent fashion (5,6). |

## Additional Information

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| <b>Gene ID</b>     | 11480                                                                                                                                                                                                                                                                                              |
| <b>Other Names</b> | ACVR2; ACTRII; ActrIIa; TactrII; rActR-II; actr2a; acvr2a; wu:fa02e10; AVR2A_HUMAN; Activin receptor type IIA (ACTR-IIA   ACTRIIA); 2.7.11.30; AVR2A_MOUSE; Activin receptor type IIA (ACTR-IIA); AVR2A_RAT; activin A receptor type 2A; activin A receptor, type II; activin A receptor, type IIA |
| <b>Dilution</b>    | WB=1:500-2000                                                                                                                                                                                                                                                                                      |
| <b>Storage</b>     | 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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| <b>Name</b>              | Acvr2a {ECO:0000312   MGI:MGI:102806}                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>          | Acvr2                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Function</b>          | On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for activin A, activin B and inhibin A. Mediates induction of adipogenesis by GDF6 (PubMed: <a href="#">23527555</a> ). |
| <b>Cellular Location</b> | Cell membrane; Single-pass type I membrane protein                                                                                                                                                                                                                                                                                                                                                           |
| <b>Tissue Location</b>   | Brain, testis, intestine, liver and kidney.                                                                                                                                                                                                                                                                                                                                                                  |

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