

# AGPS Rabbit pAb

Catalog # AP99733

## Product Information

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| <b>Application</b>             | IHC-P, IHC-F, IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Primary Accession</b>       | <a href="#">O00116</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Other Accession</b>         | <a href="#">O00116</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Calculated MW</b>           | 72912                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from human AGPS/Alkyl-DHAP synthase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Epitope Specificity</b>     | 31-130/658                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <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 FAD-binding oxidoreductase/transferase type 4 family. Contains 1 FAD-binding PCMH-type domain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>SUBUNIT</b>                 | Homodimer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>DISEASE</b>                 | Defects in AGPS are the cause of rhizomelic chondrodysplasia punctata type 3 (RCDP3) [MIM:600121]. RCDP3 is characterized by rhizomelic shortening of femur and humerus, vertebral disorders, cataract, cutaneous lesions and severe mental retardation.                                                                                                                                                                                                                                                                                                                                       |
| <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> | This gene is a member of the FAD-binding oxidoreductase/transferase type 4 family. It encodes a protein that catalyzes the second step of ether lipid biosynthesis in which acyl-dihydroxyacetonephosphate (DHAP) is converted to alkyl-DHAP by the addition of a long chain alcohol and the removal of a long-chain acid anion. The protein is localized to the inner aspect of the peroxisomal membrane and requires FAD as a cofactor. Mutations in this gene have been associated with rhizomelic chondrodysplasia punctata, type 3 and Zellweger syndrome. [provided by RefSeq, Jul 2008] |

## Additional Information

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| <b>Gene ID</b>     | 8540                                                                                                                                                                                                                                                                                                                       |
| <b>Other Names</b> | ADAP-S; ADAS; ADHAPS; ADPS; ALDHPSY; RCDP3; 5832437L22; 9930035G10Rik; Adaps; bs2; Ads; ADAS_HUMAN; AGPS; Alkyl-DHAP synthase; Aging-associated gene 5 protein; Alkylglycerone-phosphate synthase; 2.5.1.26; ADAS_MOUSE; ADAS_RAT; alkylglycerone phosphate synthase; Alkyldihydroxyacetonephosphate synthase, peroxisomal |
| <b>Dilution</b>    | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500                                                                                                                                                                                                                                                                               |

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| <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. |
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## Protein Information

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| <b>Name</b>              | AGPS                                                                                                                                                                                                                                                                |
| <b>Function</b>          | Catalyzes the exchange of the acyl chain in acyl-dihydroxyacetonephosphate (acyl-DHAP) for a long chain fatty alcohol, yielding the first ether linked intermediate, i.e. alkyl-dihydroxyacetonephosphate (alkyl-DHAP), in the pathway of ether lipid biosynthesis. |
| <b>Cellular Location</b> | Peroxisome membrane {ECO:0000250 UniProtKB:P97275}. Peroxisome {ECO:0000250 UniProtKB:P97275}                                                                                                                                                                       |

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