

## Rabbit AHCYL1 Polyclonal Antibody | anti-AHCYL1 antibody

AHCYL1 Antibody

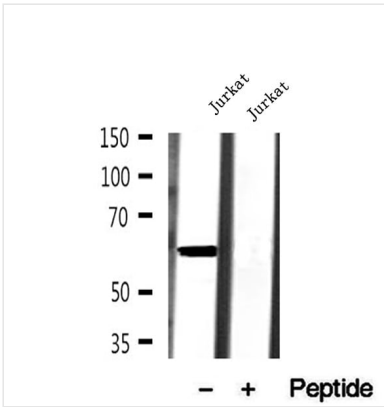
|                               |                       |                                        |                                                           |
|-------------------------------|-----------------------|----------------------------------------|-----------------------------------------------------------|
| CATALOG #<br><b>AAA322917</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human, Mouse, Rat</b> | APPLICATIONS<br><b>Immunohistochemistry, Western Blot</b> |
|-------------------------------|-----------------------|----------------------------------------|-----------------------------------------------------------|

### PRODUCT SYNONYMS

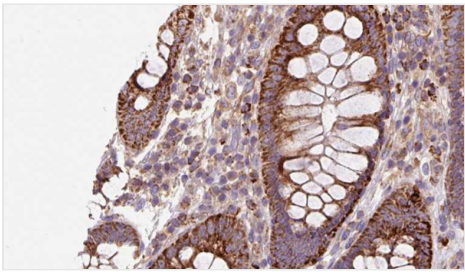
AHCYL1; Polyclonal Antibody; AHCYL1 Antibody; AA409031; AdoHcyase 2; Ahcy-rs3; DC expressed AHCY like molecule; DC-expressed AHCY-like molecule; DCAL; Dendritic cell expressed AHCY like protein; Inositol 1; 4; 5-trisphosphate receptor-binding protein; IP3R binding protein released with inositol 1; 5-trisphosphate; IRBIT; PRO0233; Putative adenosylhomocysteinase 2; S adenosyl L homocysteine hydrolase 2; S adenosylhomocysteine hydrolase like 1; S-adenosyl-L-homocysteine hydrolase 2; S-adenosylhomocysteine hydrolase-like protein 1; SAHH2\_HUMAN; XPVKONA; anti-AHCYL1 antibody

### PRODUCT SPECIFICATIONS

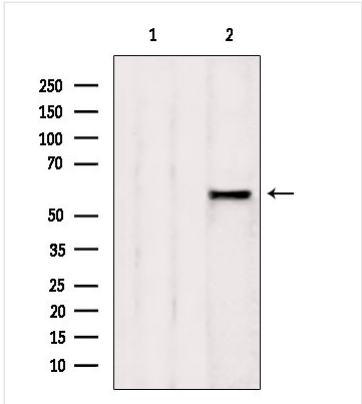
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|--------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Host                                             | Rabbit                                                                                        |
| Reactivity                                       | Human, Mouse, Rat                                                                             |
| Clonality                                        | Polyclonal                                                                                    |
| Isotype                                          | IgG                                                                                           |
| Specificity                                      | AHCYL1 antibody detects endogenous levels of AHCYL1.                                          |
| Purity/Purification                              | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin. |
| Form/Format                                      | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Concentration                                    | 1mg/ml (varies by lot)                                                                        |
| Sequence Length                                  | 483                                                                                           |
| Applicable Applications for anti-AHCYL1 antibody | IHC (Immunohistochemistry), WB (Western Blot)                                                 |
| Immunogen                                        | A synthesized peptide derived from human AHCYL1.                                              |
| Subcellular Location                             | Endoplasmic Reticulum; Cytosol; Plasma Membrane                                               |
| Tissue Specificity                               | Expressed in dendritic cells.                                                                 |
| Conjugation                                      | Unconjugated                                                                                  |
| Preparation and Storage                          | Store at -20 degree C. Stable for 12 months from date of receipt.                             |



**WB (Western Blot)**  
Western blot analysis of extracts of Jurkat cells, using AHCYL1 antibody.



**IHC (Immunohistochemistry)**  
AAA322917 at 1/100 staining Mouse colon tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



**WB (Western Blot)**  
Western blot analysis of extracts from rat spleen, using AHCYL1 antibody. Lane 1 was treated with the blocking peptide.

ADDITIONAL INFORMATION

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| Related Product Information for anti-AHCYL1 antibody | <p>Function: Multifaceted cellular regulator which coordinates several essential cellular functions including regulation of epithelial HCO3-and fluid secretion, mRNA processing and DNA replication. Regulates ITPR1 sensitivity to inositol 1, 4, 5-trisphosphate competing for the common binding site and acting as endogenous 'pseudoligand' whose inhibitory activity can be modulated by its phosphorylation status. In the pancreatic and salivary ducts, at resting state, attenuates inositol 1, 4, 5-trisphosphate-induced calcium release by interacting with ITPR1 (PubMed:16793548). When extracellular stimuli induce ITPR1 phosphorylation or inositol 1, 4, 5-trisphosphate production, dissociates of ITPR1 to interact with CFTR and SLC26A6 mediating their synergistic activation by calcium and cAMP that stimulates the epithelial secretion of electrolytes and fluid (By similarity). Also activates basolateral SLC4A4 isoform 1 to coordinate fluid and HCO3-secretion (PubMed:16769890). Inhibits the effect of STK39 on SLC4A4 and CFTR by recruiting PP1 phosphatase which activates SLC4A4, SLC26A6 and CFTR through dephosphorylation (By similarity). Mediates the induction of SLC9A3 surface expression produced by Angiotensin-2 (PubMed:20584908). Depending on the cell type, activates SLC9A3 in response to calcium or reverses SLC9A3R2-dependent calcium inhibition (PubMed:18829453). May modulate the polyadenylation state of specific mRNAs, both by controlling the subcellular location of FIP1L1 and by inhibiting PAPOLA activity, in response to a stimulus that alters its phosphorylation state (PubMed:19224921). Acts as a (dATP)-dependent inhibitor of ribonucleotide reductase large subunit RRM1, controlling the endogenous dNTP pool and ensuring normal cell cycle progression (PubMed:25237103). In vitro does not exhibit any S-adenosyl-L-homocysteine hydrolase activity (By similarity).</p> <p>Subunit Structure: Forms multimers (PubMed:16793548). Forms heteromultimers with AHCYL2 (via the C-terminal region) (PubMed:19220705). Interacts (when phosphorylated) with ITPR1 (when not phosphorylated); the interaction suppresses inositol 1, 4, 5-trisphosphate binding to ITPR1 (PubMed:16793548). Interacts with CFTR and SLC26A6; the interactions take place once AHCYL1 is released from ITPR1 and increase CFTR and SLC26A6 activities (By similarity). Interacts with RRM1; in a phosphorylation-and (dATP)-dependent manner. Interacts (via PEST domain when phosphorylated) with SLC4A4 isoform 1 but not isoform 2; the interaction increases SLC4A4 isoform 1 activity (PubMed:16769890). Interacts (when phosphorylated) with SLC9A3; the interaction is required for SLC9A3 apical location and activity (PubMed:18829453, PubMed:20584908). Interacts (when phosphorylated) with FIP1L1; the interaction is direct and associates AHCYL1 with the CPSF complex and RNA (PubMed:19224921). Interacts with PAPOLA (PubMed:19224921).</p> <p>Post-translational Modifications: Phosphorylated at Ser/Thr residues between Ser-68 and Thr-72 in the PEST region: required for interaction with dATP-bound RRM1 and ITPR1. Phosphorylation at Ser-68 by PRKD1 and CAMK4 is required for further phosphorylations by CSNK1A1 (PubMed:16793548). Phosphorylation is induced by oxidative stress (PubMed:19224921). Probably phosphorylated by CAMK2A; phosphorylation at Ser-68 may be required for interaction with SLC9A3 (PubMed:20584908).</p> <p>Similarity: The PEST region is essential for the interaction with ITPR1, and, when phosphorylated, is also the RRM1-binding region. The PDZ-binding region is required for maximal interaction with ITPR1 and is also responsible for the IP3-insensitive interaction with ITPR1 (By similarity). Belongs to the adenosylhomocysteinase family.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                                |
|----------------------------------|----------------------------------------------------------------|
| NCBI GI #                        | 336455095                                                      |
| NCBI GeneID                      | 10768                                                          |
| NCBI Accession #                 | NP_001229602.1                                                 |
| NCBI GenBank Nucleotide #        | NM_001242673.1                                                 |
| UniProt Accession #              | O43865; Q2TAJ6; Q502W8; Q5VSM0; Q6P171; Q96PK4; Q9UG84; B4E168 |
| Molecular Weight                 | Observed: 60 kDa<br>Predicted: 59 kDa                          |
| NCBI Official Full Name          | S-adenosylhomocysteine hydrolase-like protein 1 isoform b      |
| NCBI Official Synonym Full Names | adenosylhomocysteinase like 1                                  |
| NCBI Official Symbol             | AHCYL1                                                         |
| NCBI Official Synonym Symbols    | DCAL; IRBIT; PPP1R78; PRO0233; XPVKONA                         |
| NCBI Protein Information         | S-adenosylhomocysteine hydrolase-like protein 1                |

|                            |                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------|
| UniProt Protein Name       | S-adenosylhomocysteine hydrolase-like protein 1                                                           |
| UniProt Gene Name          | AHCYL1                                                                                                    |
| UniProt Synonym Gene Names | DCAL; IRBIT; XPVKONAIImportedManual assertion inferred from database entriesiHGNC:344; IRBIT; AdoHcyase 2 |

**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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ahcyl1-antibody-immunohistochemistry-western-blot-elisa/322917>