

Product datasheet for TP508502

Ahcyl1 (NM_145542) Mouse Recombinant Protein

Product data:

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| Product Type: | Recombinant Proteins |
| Description: | Purified recombinant protein of Mouse S-adenosylhomocysteine hydrolase-like 1 (Ahcyl1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug |
| Species: | Mouse |
| Expression Host: | HEK293T |
| Expression cDNA Clone or AA Sequence: | >MR208502 protein sequence Red=Cloning site Green=Tags(s) |

MSMPDAMPLPGVGEELKQAKEIEDAEKYSFMATVTKAPKKQIQFADDMQEFTKFPTKTGRRSLRSISQS
STDSYSSAASYTSSDDEVSPREKQQTNSKGSSNFCVKNIKQAEFGRREIEIAEQDMSALISLRKRAQGE
KPLAGAKIVGCTHITAQTAVLIETLCALGAQCRWSACNIYSTQNEVAAAALAEAGVAVFAWKGESEDDFWW
CIDRCVNMMDGWQANMILDDGGDLTHWVYKYPNVFKKIRGIVEESVTGVHRLYQLSKAGKLCVPAMNVND
SVTKQKFDNLYCCRESILDGLKRRTDVMFSGKQVWVCGYGEVKGCCAALKALGAIVYITEIDPICALQA
CMDGFRVVKLNEVIRQVDVITCTGNKNVVTREHLDRMKNSCIVCNMGHSNTEIDVTSRLTPELTWERVR
SQVDHVIWPDGKRVLLAEGRLNLSCSTVPTFVLSITATTQALALIELYNAPEGRYKQDVYLLPKKMDE
YVASLHLPSFDAHLTELTDDQAKYLGLNKNPFPKPNYYRY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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|----------------|--|
| Tag: | C-MYC/DDK |
| Predicted MW: | 59 kDa |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| Buffer: | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol |
| Note: | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| Storage: | Store at -80°C after receiving vials. |
| Stability: | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| RefSeq: | NP_663517 |



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| Locus ID: | 229709 |
| UniProt ID: | Q80SW1 |
| RefSeq Size: | 3866 |
| Cytogenetics: | 3 46.83 cM |
| RefSeq ORF: | 1593 |
| Synonyms: | 1110034F20Rik; AA409031; AA414901; Ahcy-rs3; DCAL; Irbit |
| Summary: | <p>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 (By similarity). 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 (PubMed:12525476, PubMed:23542070). Also activates basolateral SLC4A4 isoform 1 to coordinate fluid and HCO₃(-) secretion (PubMed:19224921). Inhibits the effect of STK39 on SLC4A4 and CFTR by recruiting PP1 phosphatase which activates SLC4A4, SLC26A6 and CFTR through dephosphorylation (PubMed:19033647, PubMed:21317537). Mediates the induction of SLC9A3 surface expression produced by Angiotensin-2. Depending on the cell type, activates SLC9A3 in response to calcium or reverses SLC9A3R2-dependent calcium inhibition. 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. Acts as a (dATP)-dependent inhibitor of ribonucleotide reductase large subunit RRM1, controlling the endogenous dNTP pool and ensuring normal cell cycle progression (By similarity). In vitro does not exhibit any S-adenosyl-L-homocysteine hydrolase activity (PubMed:12525476).[UniProtKB/Swiss-Prot Function]</p> |