OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC203781

Ahcyl1 (NM_145542) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ahcyl1 (NM_145542) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ahcyl1
Synonyms:	1110034F20Rik; AA409031; AA414901; Ahcy-rs3; DCAL; Irbit
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC018218

CGGGCGAGCGCGTGGCCGAGGGCGCCGCGCGGACGGGCGGGCGCCCGTGAGGGAAAGAGGCGGGGGCGGC
GGGTTAGCCGCGGGCCGGGCCGGCCGGGGGATGTCGATGCCTGACGCGATGCCGCTGCCCGGTGTCGGGG
AGGAGCTGAAACAGGCCAAGGAGATCGAGGACGCCGAGAAGTACTCCTTCATGGCCACGGTCACCAAGGC
TCCCAAGAAGCAAATCCAGTTTGCTGATGACATGCAAGAGTTCACCAAATTCCCTACTAAGACTGGCCGG
AGATCTTTGTCTCGTTCCATCTCACAATCCTCCACAGACAGCTACAGTTCAGCTGCATCCTATACAGATA
GCTCTGATGATGAGGTTTCCCCCCGAGAGAAGCAGCAAACCAACTCGAAGGGCAGCAGCAATTTCTGTGT
GAAGAACATCAAGCAGGCAGAGTTTGGACGCCGGGAGATTGAGATTGCAGAGCAAGACATGTCTGCTCTG
ATTTCACTCAGGAAACGTGCTCAGGGAGAGAAGCCTTTGGCTGGTGCTAAAATAGTGGGCTGTACACACA
TCACGGCCCAGACAGCGGTATTAATTGAGACCCTTTGTGCCCTGGGAGCTCAGTGCCGCTGGTCTGCCTG
CAACATCTATTCAACTCAGAATGAAGTAGCTGCAGCACTGGCTGAGGCTGGAGTCGCGGTGTTTGCTTGG
AAGGGCGAGTCAGAAGATGATTTCTGGTGGTGCATTGACCGCTGTGTCAACATGGATGGGTGGCAGGCTA
ACATGATCCTGGATGATGGGGGAGACTTAACCCACTGGGTTTATAAGAAGTATCCAAACGTGTTTAAGAA
GATCCGAGGCATTGTGGAAGAGAGCGTGACTGGTGTTCACAGGCTGTATCAGCTCTCCAAAGCTGGGAAG
CTCTGTGTTCCAGCCATGAATGTCAATGATTCTGTTACCAAACAGAAGTTTGATAACCTGTACTGCTGCC
GAGAATCCATTTTGGATGGCCTGAAGAGGACCACGGATGTGATGTTTGGTGGGAAACAGGTGGTGGTGTG
TGGCTATGGTGAGGTAGGAAAGGGCTGCTGTGCTGCTCTCAAGGCCCTTGGAGCAATTGTCTACATCACA
GAAATTGACCCCATCTGTGCTCTGCAGGCCTGCATGGATGGGTTCAGGGTGGTGAAGCTGAATGAAGTCA
TCCGGCAGGTGGACGTTGTAATTACTTGCACAGGAAATAAGAATGTAGTGACTCGGGAGCACTTGGACCG
AATGAAAAATAGTTGTATTGTGTGCAATATGGGCCATTCCAACACGGAGATCGATGTGACCAGCCTCCGC
ACTCCAGAACTAACATGGGAGCGTGTACGTTCTCAGGTGGACCATGTCATCTGGCCTGATGGCAAACGGG
TCGTCCTTCTAGCAGAGGGCCGTTTACTTAATCTGAGCTGCTCCACAGTTCCTACCTTTGTTCTTTCCAT
CACGGCTACAACACAGGCTTTGGCACTGATAGAGCTTTACAACGCCCCGGAGGGACGCTACAAACAGGAT
GTGTACTTGCTTCCTAAGAAGATGGATGAATATGTTGCCAGCTTGCACCTACCATCATTTGATGCCCACC
TGACAGAACTGACAGATGACCAAGCAAAGTATCTGGGACTCAACAAAAATGGGCCATTCAAACCTAATTA
TTACAGATACTAATGGACATAGTACAGTGACCAGTCCACATGAACCACGCAACTCTAATAGAGTATTTTT
TAAGATAAAAAAAAAAAAAAAA

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Restriction Sites:	RsrII-NotI
ACCN:	NM_145542
Insert Size:	1593 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	BC018218, AAH18218
RefSeq Size:	1772 bp
RefSeq ORF:	1593 bp
Locus ID:	229709
UniProt ID:	Q80SW1
Cytogenetics:	3 46.83 cM

Gene Summary: 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]