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Product datasheet for RC200394

ATP6AP1 (NM_001183) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP6AP1 (NM_001183) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ATP6AP1
Synonyms:	16A; Ac45; ATP6IP1; ATP6S1; CF2; VATPS1; XAP-3; XAP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200394 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGGCGGCCATGGCGACGGCTCGAGTGCGGATGGGGCCGCGGTGCGCCCAGGCGCTCTGGCGCATGC
CGTGGCTGCCGGTGTTTTTGTCGTTGGCGGCGGCGGCGGCGGCAGCGGCGGAGCAGCAGGTCCCGCT
GGTGCTGTGGTCGAGTGACCGGGACTTGTGGGCTCCTGCGGCCGACACTCATGAAGGCCACATCACCAGC
GACTTGCAGCTCTCTACCTACTTAGATCCCGCCCTGGAGCTGGGTCCCAGGAATGTGCTGCTGTTCCTGC
AGGACAAGCTGAGCATTGAGGATTTCACAGCATATGGCGGTGTGTTTGGAAACAAGCAGGACAGCGCCTT
TTCTAACCTAGAGAATGCCCTGGACCTGGCCCCCTCCTCACTGGTGCTTCCTGCCGTCGACTGGTATGCA
GTCAGCACTCTGACCACTTACCTGCAGGAGAAGCTCGGGGCCAGCCCCTTGCATGTGGACCTGGCCACCC
TGCGGGAGCTGAAGCTCAATGCCAGCCTCCCTGCTCTGCTGCTCATTCGCCTGCCCTACACAGCCAGCTC
TGGTCTGATGGCACCCAGGGAAGTCCTCACAGGCAACGATGAGGTCATCGGGCAGGTCCTGAGCACACTC
AAGTCCGAAGATGTCCCATACACAGCGGCCCTCACAGCGGTCCGCCCTTCCAGGGTGGCCCGTGATGTAG
CCGTGGTGGCCGGAGGGCTAGGTCGCCAGCTGCTACAAAAACAGCCAGTATCACCTGTGATCCATCCTCC
TGTGAGTTACAATGACACCGCTCCCCGGATCCTGTTCTGGGCCCAAAACTTCTCTGTGGCGTACAAGGAC
CAGTGGGAGGACCTGACTCCCCTCACCTTTGGGGTGCAGGAACTCAACCTGACTGGCTCCTTCTGGAATG
ACTCCTTTGCCAGGCTCTCACTGACCTATGAACGACTCTTTGGTACCACAGTGACATTCAAGTTCATTCT
GGCCAACCGCCTCTACCCAGTGTCTGCCCGGCACTGGTTTACCATGGAGCGCCTCGAAGTCCACAGCAAT
GGCTCCGTCGCCTACTTCAATGCTTCCCAGGTCACAGGGCCCAGCATCTACTCCTTCCACTGCGAGTATG
TCAGCAGCCTGAGCAAGAAGGGTAGTCTCCTCGTGGCCCGCACGCAGCCCTCTCCCTGGCAGATGATGCT
TCAGGACTTCCAGATCCAGGCTTTCAACGTAATGGGGGAGCAGTTCTCCTACGCCAGCGACTGTGCCAGC
TTCTTCTCCCCCGGCATCTGGATGGGGCTGCTCACCTCCCTGTTCATGCTCTTCATCTTCACCTATGGCC
TGCACATGATCCTCAGCCTCAAGACCATGGATCGCTTTGATGACCACAAGGGCCCCACTATTTCTTTGAC
CCAGATTGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200394 protein sequence
Red=Cloning site Green=Tags(s)

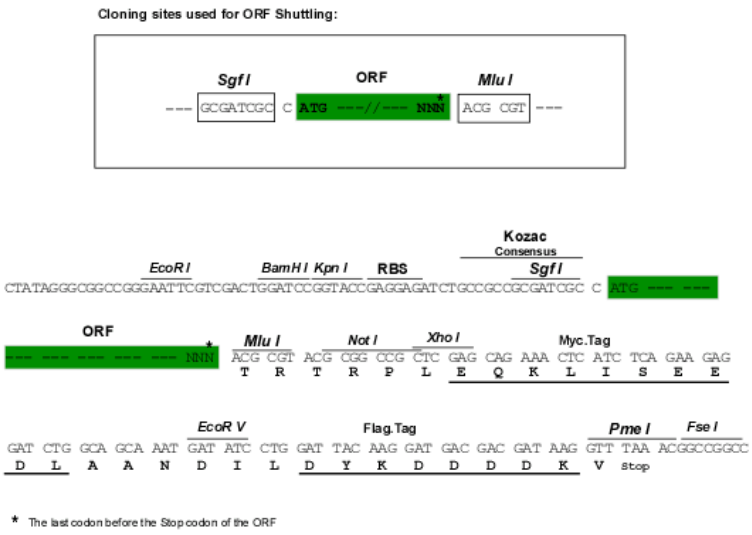
MMAAMATARVRMGPRCAQALWRMPWLPVFLSLAAAAAAAAAEQQVPLVLWSSDRDLWAPAADTHEGHITS
DLQLSTYLDPALELGPRNVLLFLQDKLSIEDFTAYGGVFGNKQDSAFSNLENALDLAPSSLVLPAVDWYA
VSTLTTYLQEKLGASPLHVDLATLRELKLNASLPALLLIRLPYTASSGLMAPREVLTGNDEVIGQVLSTL
KSEDVPYTAALTAVRPSRVARDVAVVAGGLGRQLLQKQPVSPVIHPPVSYNDTAPRILFWAQNFSVAYKD
QWEDLTPLTFGVQELNLTGSFWNDSFARLSLTYERLFGTTVTFKFILANRLYPVSARHWFTMERLEVHSN
GSVAYFNASQVTGPSIYSFHCEYVSSLSKKGSLLVARTQPSPWQMMLQDFQIQAFNVMGEQFSYASDCAS
FFSPGIWMGLLTSLFMLFIFTYGLHMILSLKTMDRFDDHKGPTISLTQIV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6150_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001183

ORF Size: 1410 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_001183.6

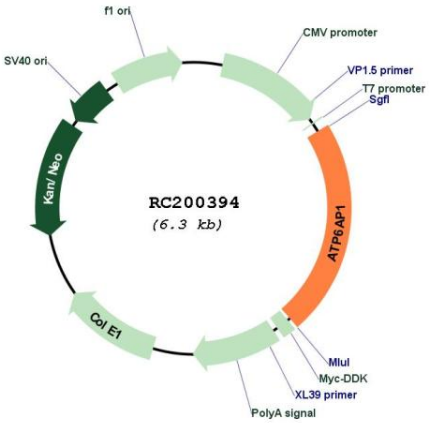
RefSeq Size: 2100 bp

RefSeq ORF: 1413 bp

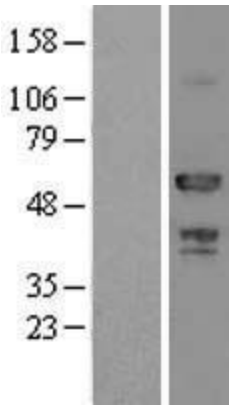
Locus ID: 537

UniProt ID:	Q15904
Cytogenetics:	Xq28
Protein Families:	Transmembrane
Protein Pathways:	Epithelial cell signaling in Helicobacter pylori infection, Lysosome, Metabolic pathways, Oxidative phosphorylation, Vibrio cholerae infection
MW:	52 kDa
Gene Summary:	This gene encodes a component of a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. Vacuolar ATPase (V-ATPase) is comprised of a cytosolic V1 (site of the ATP catalytic site) and a transmembrane V0 domain. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, and receptor-mediated endocytosis. The encoded protein of this gene may assist in the V-ATPase-mediated acidification of neuroendocrine secretory granules. This protein may also play a role in early development. [provided by RefSeq, Aug 2013]

Product images:



Circular map for RC200394



Western blot validation of overexpression lysate (Cat# [LY400473]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200394 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).