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Product datasheet for SC119114

ATP6V1B1 (NM_001692) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ATP6V1B1 (NM_001692) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATP6V1B1
Synonyms:	ATP6B1; DRTA2; RTA1B; VATB; VMA2; VPP3
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001692, the custom clone sequence may differ by one or more nucleotides

ATGGCCATGGAGATAGACAGCAGGCCTGGGGGGCTCCCCGGCAGTAGCTGCAACCTAGGTGCAGCCCGAG
AACACATGCAGGCGGTCACCCGAAACTACATCACCCACCCCCGTGTCACCTACAGGACTGTGTGCAGCGT
GAACGGGCCCCTGGTGGTGCTGGACCGGGTCAAGTTTGCCCAGTATGCGGAGATCGTCCACTTCACCCTC
CCAGATGGGACTCAGAGGAGCGGGCAGGTGCTTGAGGTGGCTGGCACCAAGGCGATTGTTCAGGTGTTTG
AAGGGACATCAGGGATCGATGCCAGGAAGACCACTTGCGAATTTACAGGGGACATCCTACGAACTCCGGT
GTCAGAGGACATGCTGGGTCGGGTTTTCAATGGCTCCGGCAAGCCCATTGACAAGGGGCCAGTGGTCATG
GCGGAGGACTTTCTGGATATCAATGGCCAGCCCATCAACCCGCACTCCCGCATCTACCCCGAGGAGATGA
TTCAGACGGGCATTTCTCCTATTGACGTCATGAACAGCATTGCCCGCGGCCAGAAGATCCCCATCTTCTC
AGCAGCCGGGCTCCCCCACAATGAGATTGCCGCTCAGATCTGCCGCCAGGCGGGGCTGGTGAAGAAGTCC
AAGGCTGTGCTGGATTACCATGACGACAACTTCGCCATCGTCTTTGCAGCCATGGGGGTGAACATGGAGA
CAGCCAGATTCTTCAAGTCTGACTTTGAGCAGAATGGAACCATGGGGAACGTCTGCCTCTTCCTGAACTT
GGCCAATGACCCCACGATCGAGCGGATCATCACCCCGCGCCTGGCGCTGACCACTGCTGAATTCCTTGCC
TACCAGTGTGAGAAGCATGTGCTGGTCATACTGACGGACATGAGTTCCTATGCAGAGGCCTTGCGGGAGG
TCTCTGCTGCTAGAGAGGAGGTGCCTGGGCGCCGAGGGTTTCCTGGATATATGTACACAGACCTGGCCAC
CATCTACGAGCGGGCGGGCCGCGTGGAGGGTCGGGGAGGATCCATCACACAGATCCCCATCCTCACCATG
CCCAACGACGATATCACCCACCCTATCCCAGACTTGACGGGCTTCATCACAGAGGGACAGATCTACGTGG
ACAGACAGCTTCACAACAGACAGATCTACCCCCCCATCAACGTGCTCCCTTCCCTGTCGCGGCTGATGAA
GTCAGCCATTGGGGAAGGCATGACAAGAAAGGACCATGGAGATGTCTCCAACCAGCTGTACGCCTGCTAT
GCCATCGGGAAGGACGTGCAGGCCATGAAGGCAGTAGTTGGGGAGGAGGCGCTCACCTCTGAGGACCTGC
TCTACCTGGAATTCCTGCAGAAGTTTGAGAAGAACTTCATCAATCAGGGCCCCTACGAGAACCGCTCGGT
GTTCGAGTCGCTGGACCTGGGCTGGAAGCTGCTGCGCATCTTCCCCAAGGAGATGCTGAAGCGCATTCCG
CAGGCCGTGATCGACGAGTTCTATTCCCGCGAGGGGGCGCTGCAGGACCTCGCGCCTGACACTGCGCTCT
AG

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001692 unedited
GGGTTCAAATTTTGTNATACGACTTCACTATAGGGCGGCCGCGAATTCGCACGAGCTCAG
ACACTGGNGCTCCCAGCTGGGGACTGCTCCACGGCCATGGAGATAGACAGCAGGCCTGGG
GGGCTCCCCGGCAGTAGCTGCAACCTAGGTGCAGCCCGAGAACACATGCAGGCGGTCANC
CCGAAACTACATCACCCACCCCCGTGTCACCTACAGGACTGTGTGCAGCGTGAACGGGCC
CCTGGTGGTGCTGGACCGGGTCAAGTTTGCCCAGTATGCGGAGATCGTCCACTTCACCCT
CCCAGATGGGACTCAGAGGAGCGGGCAGGTGCTTGAGGTGGCTGGCACCAAGGCGATTGT
TCAGGTGTTTGAAGGGACATCAGGGATCGATGCCAGGAAGACCACTTGCGAATTTACAGG
GGACATCCTACGAACTCCGGTGTCAGAGGACATGCTGGGTCGGGTTTTCAATGGCTCCGG
CAAGCCCATTGACAAGGGGCCAGTGGTCATGGCGGAGGACTTTCTGGATATCAATGGCCA
GCCCATCAACCCGCACTCCCGCATCTACCCCGAGGAGATGATTCAGACGGGCATTTCTCC
TATTGACGTCATGAACAGCATTGCCCGCGGCCAGAAGATCCCCATCTTCTCAGCAGCCGG
GCTTCCCCACAATGAGATTGCCGCTCAGATCTGCCGCCAGGCGGGGCTGGTGAAGAAGTC
CAAGGCTGTGCTGGATTACCATGACGANCACTTCGCCATCGTCTTTGCAGCCATGGGGGT
GAACATGGAGACAGCCAGATTCTTCAGTCTGACNTTGAGCAGAATGGAACCATGGGAACG
TCTGCCTCTTCCTGAACTTGGCAATGACCCCCGATCGAGCGATCATCACCCGCGCCTGGG
CTGACACTGCTGAATTNCTTGCTCN

3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_001692 unedited
AGTTTTATATATATCTTTTTTTTTTTTCAGTTACTTTTTATTTTTATTTTGTGGGCTTTTA
ACATAAAATACAGATGCTCCCGTCAGAGTAAGGCATCGCAACCTTCAGTTCTTCCGCAGC
ACCGGGAGTCGAGGGGGAGGCATGGAGCGCGGGAAAAGGAATCGAGCGAGGGAAAGGGAT
GGAGCGTGCGGCGCCCCCACCACCTCGGAGCCAGCGGAGGGCGGAGGGCGGCGCATAAGC
CGCTGGTTGGGGTGGCGAGGGAGGGGAGACCCGGGAGCCGAGGGTAGGTTCCCTGCCGGT
GTTGGGGTGCCACGGCGCGCGGGGCTAGAGCGCATTGTCAGGCGCGAGGTCCTGCAGCGC
CCCCTCGCGGGAATAGAACTCGTCGATCACGGCCTGCGGAATGCGCTTCAGCATCTCCTT
GGGGAAGATGCGCAGCAGCTTCCAGCCCAGGTCCAGCGACTCGAACACCGAGCGGTTCTC
GTAGGGGCCCTGATTGATGAAGTTCTTCTCAAACTTCTGCAGGAATTCCAGGTAGAGCAG
GTCCTCAGAGGTGAGCGCCTCCTCCCCAACTACTGCCTTCATGGCCTGCACGTCCTTCCC
GATGGCATAGCAGGCGTACAGCTGGTTGGAGACATCTCCATGGTCCTTTCTTGTCATGCC
TTCCCCATGGCTGACTTCATCAGCCGCGACAGGGAAAGGAGCACGTTGATGGGGGGGTAG
ATCTGTCTGTTGTGAAGCTGTCTGTCCACGTAGATCTGTCCCTCTGTGATGAAGCCCGTC
CAGTCTGGGATAGGGTGGGTGATATCGTCCTTGGGCATGGTGAGGATGGGGGACCA
```

Restriction Sites: NotI-NotI

ACCN: NM_001692

Insert Size: 2000 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: NM_001692.2, NP_001683.2

RefSeq Size: 1956 bp

RefSeq ORF: 1956 bp

Locus ID: 525

UniProt ID: P15313

Cytogenetics: 2p13.3

Domains: ATP-synt_ab, ATP-synt_ab_C, ATP-synt_ab_N

Protein Families: Druggable Genome

Protein Pathways: Epithelial cell signaling in Helicobacter pylori infection, Metabolic pathways, Oxidative phosphorylation, Vibrio cholerae infection

Gene Summary: This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. V-ATPase is composed of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of three A and three B subunits, two G subunits plus the C, D, E, F, and H subunits. The V1 domain contains the ATP catalytic site. The V0 domain consists of five different subunits: a, c, c', c'', and d. Additional isoforms of many of the V1 and V0 subunit proteins are encoded by multiple genes or alternatively spliced transcript variants. This encoded protein is one of two V1 domain B subunit isoforms and is found in the kidney. Mutations in this gene cause distal renal tubular acidosis associated with sensorineural deafness. [provided by RefSeq, Jul 2008]