

Product datasheet for **RR211581**

Atp2b3 (NM_133288) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp2b3 (NM_133288) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atp2b3
Synonyms:	Pmca3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR211581 representing NM_133288 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTGACATGGCGAACAGTTCATTGAGTTCACCCCAAACCCAGCAGCAGCGGGAAGTGCCTCATG
TGGGTGGCTTTGGATGCACGCTGGCAGAAGTACGCAGCCTCATGGAGCTCCGAGGTGCTGAGGCCTGCA
GAAGATCCAAGAAGCCTATGGGGATGTCACTGGGCTGTGTAGGAGACTAAAGACCTCACCTACTGAAGGC
CTGGCAGACAACCAATGACTTGGAGAAACGCAGGCAGATCTATGGGCAGAACTTCATCCCTCCAAAGC
AGCCCAAGACCTTCTGCAGCTGGTGTGGGAAGCCCTGCAGGACGTGACTCTCATCATCCTGGAGGTGGC
TGCTATCGTCTCCCTGGGCTCTCCTTCTATGCACCACCTGGAGAGGAAAGTGAAGCCTGTGGGAATGTG
TCTGGTGGGCAGAAAGACGAAGGAGAGGCCGAGGCTGGCTGGATAGAGGGGGCTGCCATCCTACTCTCTG
TCATCTGTGTGGTGTGGTACAGCCTCAATGACTGGAGCAAGGAAAAGCAGTCCGAGGTCTTCAGAG
CCGAATTGAGCAGGAACAGAAGTTTACTGTCCGAAATGGGCAGCTCCTCCAGGTCCCTGTGGCAGCC
CTGGTGGTAGGGACATTGCCAGGTCAAATACGGAGATCTTCTGCCTGCCGATGGTGTGCTCATCCAAG
GCAATGACCTCAAGATCGACGAGAGCTCCCTGACCGCGAGTCGGACCATGTGCGCAAATCAGCAGACAA
AGATCCTATGCTCTCAGGCACTCATGTCTGGAAGTTCTGGAAGAATGGTAGTAACAGCTGTTGGT
GTGAACCTCCAGACAGGCATCATCTTTACATTGCTTGGGCGAGGTGGAGAGGAGGAGAGAAGAAAGACA
AGAAAGCTAAGAAGCAGGATGGGCTGTTGCCATGGAATGCAGCCCTGAAGAGTCCGAGGGTGGGGA
AATGGAGGAGCGGAAAAGAAGAAAGCCAAACGTACCCAAGAAGGAGAAGTCACTCCTGCAAGGGAAGCTC
ACAAAAGTGGCTGTGCAGATTGGGAAAGCAGGATTGGTGTGTCTGCTATCACTGTATCATTCTGGTCC
TCTACTTTGTGATTGAGACCTTCGTTGTGGATGGCCGGGTGGTGGCAGAGTGACACCAGTGTATGT
GCAGTACTTTGTGAAGTTTTTCATTATTGGAGTCACTGTGTTGGTGTGGCTGTCCCTGAGGCGCTGCCT
CTTGCTGTACTATCTCCTTGGCTTACTCTGTTAAGAAAATGATGAAGGACAATAACCTGGTACGCCACC
TGGATGCCTGTGAGACCATGGGCAATGCCACAGCCATCTGTTCTGACAAGACAGGCACACTACCCACCA
CCGTATGACAGTGGTTCAGTCCCTACCTAGGAGACCCCACTACAAGAGATTCCAGCTCCACGCGCCCTG
ACCCCAAGATCCTCGACCTTCTGGTTCATGCCATCTCCATCAACAGTGCCTACACCACCAAAATTCTAC



CTCCAGAGAAAGAAGGCGCTCTCCACGCCAAGTGGGCAACAAAACAGAGTGTGCTCTTTTGGGCTTCAT
CTTGGACCTGAAACGTGACTTCCAACCTGTACGGGAACAGATACCAGAAGATCAGCTTTACAAAGTGAC
ACCTTCAACTCAGTTCGCAAGTCCATGAGCACAGTTATCCGAATGCCTGATGGTGGCTTCCGCTCTTCA
GCAAGGGAGCCTCAGAGATCCTGCTCAAAAAGTGTACAAACATCTTAAACAGCAATGGTGAACCTCCGAGG
ATTTCTGCTCGGGACCGGGATGACATGGTAAAGAAGATCATTGAGCCTATGGCTGTGATGGCCTCCGC
TGGGTGACCTTACCTGCATAGCTGTCTGGGCATCGAGGACCCTGTGCGACCTGAGTCCCTGAAGCCAT
TCGAAAAATGCCAGCGTGTGGCATTACAGTCCGTATGGTAACTGGAGATAACATCAACACTGCCCGGGCT
ATTGCAGCTAAGTGTGGCATCATCCAGCCAGGGGAGGATTTCTGTGCCTGGAGGGGAAGGAATTCAACA
GAAGGATTCGAAATGAGAAAGGCGAGATAGAACAGGAGAGGCTGGACAAGGTGTGGCCCAAGCTTCGGGT
GCTTGGCCCGTACTCTCCACTGATAAACATACTCTGGTCAAAGGCATAATTGACAGCACAACCTGGTGA
CAGCGGCAGGTGGTGGCTGTGACCGGGATGGACCAATGATGGACCAGCCCTCAAAAAGGCAGATGTGG
GCTTCGCCATGGGCATCGCAGGCACTGATGTGGCAAGGAGGCCCTGACATCATTCTGACTGATGACAA
CTTCACCAGCATTGTCAAGGCGGTGATGTGGGGCCGAATGTCTATGACAGCATTCCAAGTTCTCGCAG
TTTCAGTTGACAGTCAATGTGGTAGCTGTGATCGTGGCCTTACGGGTGCCTGCATTACTCAGGACTCTC
CTCTCAAAGCTGTGCAGATGTTGTGGTGAACCTGATCATGGACACATTTGCCTCACTTGCCTGGCAAC
GGAACCCCAACTGAGTCACTGTCTGCGGAAGCCATATGGCCGGGACAAGCCTCTCATCTCACGCACC
ATGATGAAGAACATCCTTGGACATGCTGTTTACCAGCTTACCATCATCTTTACTCTGCTATTTGTTGGAG
AGCTTTTCTTTGACATTGACAGTGAAGGAATGCACCTCTGCACTCGCCGCCCTCAGAGCACTACACCAT
CATCTTCAACACATTTGTCATGATGCAGCTTTTCAATGAGATCAATGCTCGAAAGATCCATGGTGAAGG
AATGCTTTTGTGGCATCTTCAAGCAACCCATCTTCTGTACCATTGTCTGGGCACCTTTGGAATTCAGA
TTGTCATTGTCCAATTTGGAGGGAAGCCCTTCACTGTCCCACTATCCCCACCAGCCAGTCAAG
TCTTTTTGTTGGTGTGGGGAGCTGGTCTGGGGACAGGTCATTGCCACTATCCCCACCAGCCAGTCAAG
TGCTGAAGGAAGCAGGGCATGGGCCTGGGAAGGATGAGATGACTGATGAAGAGTTGGCGGAAGGGGAAG
AAGAAATTGACCATGCTGAGCGAGAGCTCCGAGAGGCCAGATCCTCTGGTTTCGGGGCCTCAACCGGAT
CCAGACACAGATGGAGGTAGTGAGTACCTTCAAGAGAAGCGGGTCATTTCAAGGTGCTGTGCGCCGGCGG
TCTTCGGTCTCAGCCAGCTCCATGACGTAACCAATCTTCTACCCCTACTCACGTAACCTCTCTGCCC
CCAAGCCACCAGCGCTGCTGGCAATCCGAGTGGTGAAGCATTCCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR211581 representing NM_133288
 Red=Cloning site Green=Tags(s)

```
MGDMANSSIEFHPKPQQQREVPHVGGFGCTLAELRSLMELRGAEALQKIQEAYGDVSGLCRRLKTSPTTEG
LADNTNDLEKRRQIYQNFIPPKQPKTFLQLVWEALQDVTLLIILEVAIVSLGLSFYAPPGESEACGNV
SGGAEDEGEAEAGWIEGAAILLVVICVVLVAFNDWSKEKQFRGLQSRIEQEQQKFTVIRNGQLLQVPVAA
LVVGDIQVQKYGDLPLADGVLIQGNDLKIDESSLTGESDHVRKSADKDPMLLSGTHVMEGSRMVVAVG
VNSQTGIIFTLGAGGEEEEKDKKAKKQDGAVAMEMQPLKSAEGGEMEEREKKNANVPKKEKSVLQGKL
TKLAVQIGKAGLVMSAITVIIIVLYFVIETVVDGRVWLAECTPVYVYQYVVKFFIIGVTVLVVAVPEGLP
LAVTISLAYSVKMMKDNLLVRHLDACETMGNATAICSDKTGTLTTRMTVVQSYLGDTHYKEIPAPSAL
TPKILDLLVHAISINSAYTTKILPPEKEGALPRQVGNKTECALLGFILDLRDFQPVREQIPEDQLYKVY
TFNSVRKSMSTVIRMPDGGFRLFSGGASEILLKCTNILNSNGELRGFRPRRDDDMVKKIIEPMACDGLR
TICIAYRDFSAIQEPDWDNENEVVDLTICIAVVGIEDPVRPEVPEAIRKCQRAGITVRMVTGDNINTARA
IAAKCGIIQPGEDFLCLEGKEFNRRIRNEKGEIEQERLKVWPKLRVLARSSPTDKHTLVKGIIDSTTGE
QRQVVAVTGDGTNDGPALKKADVGFAMGIAGTDVAKEASDIILTDNFTSIVKAVMWGRNVYDSISKFLQ
FQLTVNVVAVIVAVTGTACITQDPLKAVQMLWVNLIMDTFASLALATEPPTESLLLRKPYGRDKPLISRT
MMKNILGHAVYQLTIIIFTLFVGGELFFDIDSGRNAPLHSPSEHYTIIIFNTFVMMQLFNEINARKIHGER
NVFDGIFSNPIFCITIVLGTFGIIVIVQFGGKPFSCSPLSTEQWLWCLFVGVGELVWGVVIATIPTSQLK
CLKEAGHGP GKDEMTDEELAEGEEEEIDHAERELRRGQILWFRGLNRIQTQMEVVSTFKRSGSFQAVRRR
SSVLSQLHDVTNLSPTPHVTL SAAKPTS AAGNPSGESIP
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

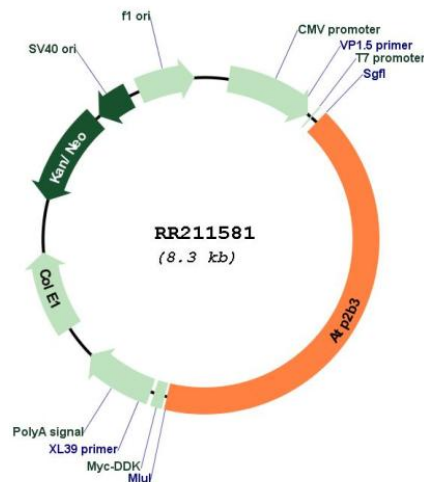
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_133288

ORF Size: 3477 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.

RefSeq: [NM_133288.1](#), [NP_579822.1](#)

RefSeq Size: 5084 bp

RefSeq ORF: 3480 bp

Locus ID: 29599

UniProt ID: [Q64568](#)

Cytogenetics: Xq37

MW: 127.3 kDa

Gene Summary: member of a family of plasma membrane calmodulin sensitive ATPases [RGD, Feb 2006]