

Product datasheet for **RN205912**

Atp7a (NM_052803) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp7a (NM_052803) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Atp7a
Synonyms:	Mnk
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN205912 representing NM_052803 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAACCAAATATGGATGCAAATTC AATTACTATCACTGTTGAGGGAATGACATGTATTTCTGTGTCC
GGACATTGAGCAGCAGATTGGGAAAGTGAATGGTGTCCATCACATTAAGTTTCCCTAGAAGAAAAAG
TGCAACTGTTATTTATAACCTAACTTCAGACTCCAAAGACCCTCCAAGAAGCTATCGATGACATGGGC
TTTGATGCTCTTCTTACAATGCTAACCTCTTCTGTCTTAACCAATACTGTGTTTCTGACTGTTACTG
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GATTTCCCTCAGCAAAGAAGTGCACTGGTTACCATAATCCCATCTGTGGTGAGTGCTAATCAGATCGTG
GAGCTGGTCCCAGACCTCAGTTTAGACATGGGAACTCAGGAGAAAAAGTCAGGAACCTTCTGAAGAGCATA
GCACACCTCAGGCAGGGGAAGTCTGCTGAAGATGAGAGTGGAAGGGATGACCTGCCATTCATGCACTAG
CACCATTGAAGGAAAAGTTGGAAAGCTGCAAGGTGTACAACGCATTAAGTGTCCCTAGACAACCAAGAA
GCTACTATTGTGTATCAACCTCATCTGATCACAGCAGAGGAAATAAAGAAGCAGATTGAAGCTGTGGTT
TTCCAGCCTTCAAAAAACAGCCAAAGTACCTCAAATTTGGGAGCCATTGACGTTGAGCCCTGAAGAG
TACACCAGTCAAATCTTCAAGAGATCTCAGCAAAGAGCCAGCGTATCCCAGTGACTCAGCAATCACA
TTTACCATAGACGGCATGCATTGTAATCATGTGTGTCAAATATCGAAAGTGCTTTATCTACACTCCAGT
ATGTAAGCAGCATAGTAGTTTCTTTAGAGAATAGGTGAGCCATTGTAAAGTACAATGCAAGCTTAGTCAC
TCCAGAAATACTGAGAAAAGCGATAGAGGCCGTTTCTCCAGGGCAATACAGAGTTAGTATTTCAAGTGAA
GTTGAAAGTCCCACAGCTCTCCCTCCAGCTCATCTTTCAGAAGATGCCTTTGAACCTAGTGAGCCAGC
CTCTGACCAAGAAGTTGTAATCAACATTAATGGCATGACTTGTAAATCTTGTGTGCAGTCGATAGAGGG
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TGTGCTTCTGTGTAGCAAACATTGAACGGAACCTAAGACGAGAAGAAGGAATATATTCTGTACTTGTAG



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CCCTAATGGCTGGCAAGGCGGAAGTAAGATATAACCCAGCTGTTATCCAACCCCGAGTGATAGCAGAGCT
TATTTCGAGAGCTTGGCTTTGGAGCTGTGGTGTGGAAAATGCTGGAGAAGGCAATGGCATTGTTGAACTT
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AACCACTTAGATCATAAACGAGAAATAAAACAATGGAGAGGGTCTTTCTTGTGAGCCTGTTTTCTGTA
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CATTGCATTTGCCTACTCTGTGTCATTCTTCTGGTTGCAATGTATGAGAGAGCCAAAGTGAACCCTATT
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CCAGAATGGATCGCTCCTCATCCGGGCAACACAGTAGGGGCAGATACAACACTTCTCAAAATGTCAAA
CTTGATAGAGGAGGCACAGACATCAAAGGCTCCTATCCAGCAGTTTGCAGACAAACTCAGTGGCTACTTTG
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TGATGGTGGGCACAGGAGTAGGTGCTCAGAATGGCATACTTATCAAAGGTGGGAGCCACTGGAGATGGC
TCATAAGGTAAAGGTAGTGGTGTGACAAGACTGGAACCAATACCCATGGAACCCCAAGTGTGAACCAA
GTAAAGGTTCTGGTGGAAAGTAACAAGATATCACGCAATAAGATCCTGGCCATTGTGGAACTGCAGAAA
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TTGCTACATAAGAGTAACTTGAAGATAGAAGAAAATAACATTAATAATGCATCCCTGGTTCAAATGATG
CAATTAATGAACAGTCATCACCTTATCGTCTATGATTATTGATGCTCATCTCTCAAATGCTGTTAATAC
TCAGCAGTACAAAGTCTCATTGGTAACCGGGAATGGATGATTAGAAATGGTCTTGTGATAAGTAAATGAT
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GGCATTACTAAGGTGTTTGTGGAAGTCTGCCTTCCACAAAGTTGCTAAGGTGAAGCAGCTTCAGGAGG
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AATTGCCATCGGCACAGGCACAGATGTAGCCATCGAAGCAGCTGACGTGGTTTTGATAAGGAATGACCTT
CTGGATGTTGTGGCAAGTATTGACTTGTCAAGGAAAACAGTCAAGAGGATTGCAATCAATTTTGTCTTTG
CTCTGATTTATAATCTGATTGGAATCCCATCGCTGCTGGAGTTTTTCTGCCATCGGCTGGTTTTTACA
ACCCTGGATGGATCCGACAGCCATGGCCGCTTCTGCTCTGTGTTGTTTCTTCCCTTTTCTCAAG
CTTACAGGAAGCCAACATATGACAATTATGAGTTGCGTCCCCGGAGCCACAGGACAGAGGAGTCCCT
CAGAAATCAGCGTTCAGTTGGAATAGATGATACCTCCAGAAATCTCCAAGACTGGGTTTACTGGACCG
GATTGTCAATTACAGCAGAGCCTCCATAAATCTACTGCTGCTGACAAACGCTCCCTCAACAGCGTCGTC
ACTAGTGAGCCTGATAAGCACTCACTTCTGGTGGGAGACTTCCGGGAAGATGACGACACCACACTGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_052803
Insert Size: 4479 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:	<ol style="list-style-type: none">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_052803.2 , NP_434690.1
RefSeq Size:	4677 bp
RefSeq ORF:	4479 bp
Locus ID:	24941
UniProt ID:	P70705
Cytogenetics:	Xq22
Gene Summary:	This gene encodes a transmembrane protein that functions in copper transport across membranes. The protein localizes to the trans-Golgi network, where it is predicted to supply copper to copper-dependent enzymes in the secretory pathway. The protein relocalizes to the plasma membrane under conditions of elevated extracellular copper and functions in the efflux of copper from cells. In human, mutations in this gene result in Menkes disease, X-linked cutis laxa, and occipital horn syndrome. [provided by RefSeq, Nov 2009]