

Product datasheet for **RR205912**

Atp7a (NM_052803) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp7a (NM_052803) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atp7a
Synonyms:	Mnk
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RR205912 representing NM_052803 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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Protein Sequence: >RR205912 representing NM_052803
 Red=Cloning site Green=Tags(s)

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LYRKPTYDNYELRPRSHTGQRSPSEISVHVGI D D T S R N S P R L G L L D R I V N Y S R A S I N S L L S D K R S L N S V V
TSEPDKHSLLVGDFREDDDTTL
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Restriction Sites:

SgfI-MluI

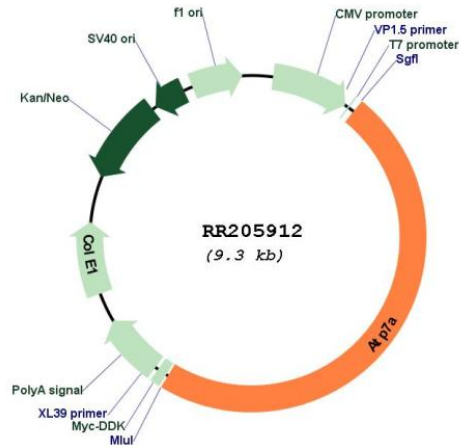
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_052803

ORF Size: 4476 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_052803.2](#), [NP_434690.1](#)

RefSeq Size: 4677 bp

RefSeq ORF: 4479 bp

Locus ID: 24941

UniProt ID: [P70705](#)

Cytogenetics: Xq22

MW: 162.1 kDa

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 relocates 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]