

Product datasheet for **MR225903**

Atp7a (NM_009726) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp7a (NM_009726) Mouse 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:	>MR225903 representing NM_009726 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCAAGTGTGGATGCAAATTC AATTACTATCACTGTTGAGGGAATGACATGTATTTCTGTGTCC
GGACATTGAACAGCAGATTGGGAAAGTGAATGGTGTCCATCACATTAAGTTTCACTAGAAGAAAAGAG
TGCAACCATTATTTATGACCCTAACTTCAGACTCCAAAGACCCTCCAAGAAGCTATCGATGACATGGGC
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CACCATTGAAGGAAAAGTTGGAAAGCTGCAAGGTGTTGAGCGCATTAAAGTGTCCCTAGACAACCAAGAA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR225903 representing NM_009726
 Red=Cloning site Green=Tags(s)

MEPSVDANSITITVEGMCISCVRTIEQQIGKVNQVHHIKVSLEEKSAIIYDPKLTQPKTLQEAIDDMG
 FDALLHNANPLPVL TNTVFL TVTAPL TLPWDHIQSTLLKTKGVTGVKISPQORSVVVTIIPSVVSASQIV
 ELVPDL SLDMGTEKKS GACEEHS TPQAGEV MLKMKVEGMC HSCSTSTIEGKVGK LQGVQRIK VSLDNQE
 ATIVFQPHLITAEIEIKQIEAVGFPAFIKKQPKYLKLG AIDVERLKNTPVKSSEGSQQKSPSYSDSTTM
 FTIEGMHCKSCVSNIESALSTLQYVSSIVVSLNRS AIVKYNASLVTP EMLRKAIEAISPQYRVSIASE
 VESTASSPSSSLQK MPLNIVSQPLTQEAVININGMTCNSCVQSIEGVI SKKPGVKSIHVS LANSTG TIE
 FDPLLTSPETLREAIEDMGFDAALPDMKEPLV VIAQPSLETPLLPSSNELE NVMTSVQNKCYIQVSGMTC
 ASCVANIERNL RREGIYSVLVALMAGKAEVRYNPAVIQPRVIAEFIRELFGAMVMENAGEGNGILELV
 VRGMCASCVHKIESTLTKHKGIFYCSVALATNKAHIKYDPEIIGPRDI IHTIGSLGFEASLVKKDRSAN
 HLDHKREIKQWRGSFLVSLFFCIPVMGLM VYMMVMDHHLATLHNNQNSNEEMINMHSAMFLERQILPGL
 SIMNLLSLLLCLPVQFCGGWYFYIQA YKALKHKTANMDVLIVLATTIAFAYSLVILLVAMFERAKVNPIT
 FFDTPMFLVFIALGRWLEHIAKGTSEALAKLISLQATEATIVTLNSEN LLLSEEQVDVELVQRGDIK
 VVPGGKFPVDGRVIEGHSMVDESLITGEAMPVAKKPGSTVIAGSNQNGSLLIRATHV GADTTLSQIVKL
 VEEAQTSKAPIQQFADKLSGYFVPFIVLVSIVTLLVWIIIGFQNF EIVETYFPGYNRSISR TETIIRFAF
 QASITVLCIACPCSLGLATPTAVMGTGVGAQNGILIKGGEPL EAMHKV VVVFDKTGTITHGTPVYNQV
 KVLVESNKISRNKILAI VGTAESENSEHPLGAAVTKYCKKELDTETLGTCTDFQVVP GCGISCKVTNIEGL
 LHKSNL KIEENNIKNASLVQID AINEQSSTSSSMIIDAHL SNAVNTQYKVLIGNREWMIRNGLVISNDV
 DESMIEHERRGRTAVLVTIDDEL CGLIAIADTVKPEAELAVHILKSMGLEVV LMTGDNSKARSIASQVG
 ITKVFAEVLPSHKVAKVKQLQE EGKRVAMVGDGINDSPALAMANV GAIAGTGTDAIEAADVVLIRNDLL
 DVVASIDL SRKTVKRIRIN FVFALIYNLVGIPIAAGVFLPIGLVLQPW MGSAAAMAASSVSVLSSLFLKL
 YRKPTYDNYELHPRSHTGQRSPSEISVHVGIDDTSRNSPRLGLLDRI VNYSRASINLLSDKRSLNSVVT
 SEPDKHSLLVGFREDDDTTL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

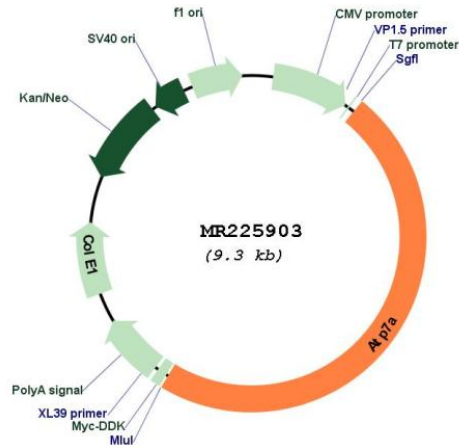
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_009726

ORF Size: 4473 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_009726.5](#), [NP_033856.3](#)

RefSeq Size: 8143 bp

RefSeq ORF: 4476 bp

Locus ID: 11977

UniProt ID: [Q64430](#)

Cytogenetics: X 47.36 cM

MW: 162.4 kDa

Gene Summary: May supply copper to copper-requiring proteins within the secretory pathway, when localized in the trans-Golgi network. Under conditions of elevated extracellular copper, it relocated to the plasma membrane where it functions in the efflux of copper from cells (By similarity). [UniProtKB/Swiss-Prot Function]