

Product datasheet for **MR202337**

Atp5o (NM_138597) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atp5o (NM_138597) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atp5o
Synonyms:	ATPO; D12Wsu28e; OSCP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202337 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGCGCCTGCAGCGTCCGGACTGTCCCGACAGGTTCCGGAGCTTCAGTACATCTGTGGTCAGGCCCT
TTGCCAAGCTTGAAGGCCCTGTTCCAGGTCTACGGCATCGAAGGCCGCTATGCAACCGCCCTGTACTC
TGCTGCATCTAAGGAGAAGAAGCTGGACCAGGTGGAGAAGGAGCTGCTGCGGTAGGGCAACTCCTGAAG
GACCCCAAAGTGTCTCTGGCTGTTCTGAATCCCTACATCAAGCGCACCGTCAAAGTGAAAAGCCTAAATG
ACATCACGAAAAGGAAAAGTTCTCCCGCTGACGGCCAACCTCATGAATTTACTTGCTGAAAATGGTCCG
CCTAGGCAACACCCAGGGTATCATCTCTGCCTTTCCACCATCATGAGTGTCCACCGCGGAGAAGTGCCG
TGACAGTGACCACAGCATCTCCTCTAGATGACGCTGTTCTCTCTGAGTTAAAGACGGTGTGAAGAGCT
TCCTGAGTCCAAACAAATACTGAAACTGGAGATCAAGACTGACCCGTAATCATGGGCGGGATGATTGT
CCGAATTGGGAAAAGTACGTTGATATGTCTGCAAAGAGCAAGATTGAGAAGCTCAGCAAGGCCATGCGG
GAGATGCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR202337 protein sequence
 Red=Cloning site Green=Tags(s)

MAAPAASGLSRQVRSFSTSVVRPFAKLVRRPPVQVYVYIEGRYATALYSAASKEKKLDQVEKELLRVGQLLK
 DPKVSLAVLNPYIKRTVKVKSNDITKREKFSPLTANLMNLLAENGLGNTQGIISAFSTIMSVHRGEVP
 CTVTTASPLDDAVLSELKTVLKSFLSPNQILKLEIKTDP SIMGMIVRIGEKEYVMSAKSKIQKLSKAMR
 EML

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_138597

ORF Size: 642 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_138597.1](#), [NM_138597.2](#), [NP_613063.1](#)

RefSeq Size: 772 bp

RefSeq ORF: 642 bp

Locus ID: 28080

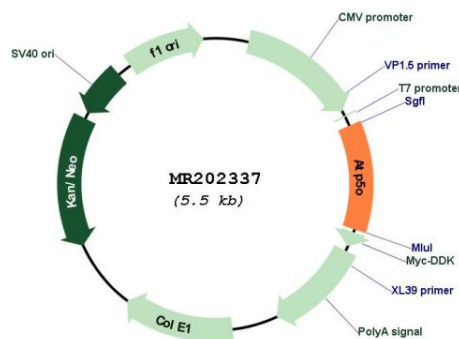
UniProt ID: [Q9DB20](#)

Cytogenetics: 16 C4

MW: 23.4 kDa

Gene Summary: Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Part of the complex F(0) domain and the peripheric stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6 static relative to the rotary elements.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202337