

# **Product datasheet for MR201389**

## tec EU:

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OriGene Technologies, Inc.

## Atp5d (NM\_025313) Mouse Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Atp5d (NM 025313) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Atp5d

**Synonyms:** 0610008F14Rik; 1500000I11Rik; AA960090; AI876556; AU020773; C85518

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>MR201389 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTTGCCCGCCTCACTGCTTCGTCACCCGGGCCTGCGCCGCCTGATGCTTCAGGCGCGTACATACGCCG
AGGCCGCCGCTGCACCTGCCCCCGCCGCGCGGGCCCGGACAGATGTCCTTCACCTTTGCCTCCCCGACGCA
GGTGTTCTTTGACAGTGCCAACGTCAAGCAAGTGGACGTGCCTACGCTGACTGGAGCCTTTGGCATCTTG
GCATCCCATGTCCCCACACACACACACGCCTCACGGCCTGGGCTGGTAGTGGTTCACACAGAAGACGGCACCA
CGACTAAGTACTTTGTGAGCAGCGGCTCCGTCACTGTGAATGCCGACTCCTCTGTGCAGTTACTAGCTGA
AGAAGCTGTGACACTGGACATGCTGGACCTGGGGGCAGCCCGGGCCAACCTGGAGAAGGCGCAGTCAGAA
CTGTCAGGTGCGGCGGACGAGGCAGCACGGGCTGAGATCCAGATCCGTATTGAGGCCAATGAAGCCCTAG

TGAAGGCCCTGGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR201389 protein sequence

Red=Cloning site Green=Tags(s)

MLPASLLRHPGLRRLMLQARTYAEAAAAPAPAAGPGQMSFTFASPTQVFFDSANVKQVDVPTLTGAFGIL ASHVPTLQVLRPGLVVVHTEDGTTTKYFVSSGSVTVNADSSVQLLAEEAVTLDMLDLGAARANLEKAQSE

LSGAADEAARAEIQIRIEANEALVKALE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

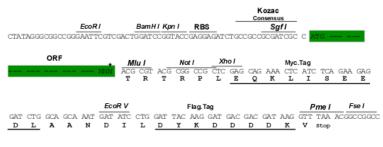
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_025313

ORF Size: 507 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:** <u>NM 025313.2</u>

RefSeq Size: 931 bp
RefSeq ORF: 507 bp
Locus ID: 66043
UniProt ID: Q9D3D9
Cytogenetics: 10 C1



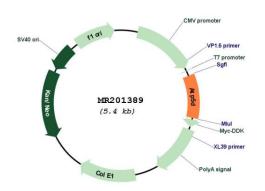
MW:

17.6 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 turnover 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(1) domain and of the central stalk which is part of the complex rotary element. Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.[UniProtKB/Swiss-Prot Function]

## **Product images:**



Circular map for MR201389