

### **Product datasheet for MR208769L2**

# Atp5a1 (NM\_007505) Mouse Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Atp5a1 (NM\_007505) Mouse Tagged Lenti ORF Clone

Tag: mGFP Symbol: Atp5a1

**Synonyms:** Al035633; AL022851; AL023067; Atpm; D18Ertd206e; Mom2

Mammalian Cell None

Selection:

**Vector:** pLenti-C-mGFP (PS100071)

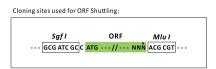
**E. coli Selection:** Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(MR208769).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_007505

ORF Size: 1662 bp



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#### Atp5a1 (NM\_007505) Mouse Tagged Lenti ORF Clone - MR208769L2

**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 007505.2</u>, <u>NP 031531.1</u>

 RefSeq Size:
 2443 bp

 RefSeq ORF:
 1662 bp

 Locus ID:
 11946

 UniProt ID:
 003265

Cytogenetics: 18 52.38 cM

**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. Subunits alpha and beta

form the catalytic core in F(1). Rotation of the central stalk against the surrounding

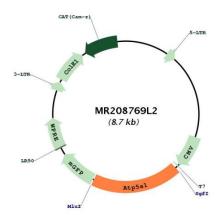
alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta

subunits. Subunit alpha does not bear the catalytic high-affinity ATP-binding sites (By similarity). Binds the bacterial siderophore enterobactin and can promote mitochondrial accumulation of enterobactin-derived iron ions (By similarity).[UniProtKB/Swiss-Prot

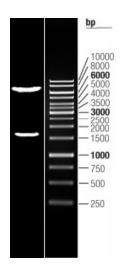
Function]



# **Product images:**



Circular map for MR208769L2



Double digestion of MR208769L2 using Sgfl and Mlul  $\,$