

### Product datasheet for MR221085L3

# Atp2b1 (NM\_026482) Mouse Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Atp2b1 (NM\_026482) Mouse Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: Atp2b1

**Synonyms:** 2810442I22Rik; E130111D10Rik; Pmca1

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(MR221085).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_026482

ORF Size: 3660 bp



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#### Atp2b1 (NM\_026482) Mouse Tagged Lenti ORF Clone - MR221085L3

**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 026482.2</u>, <u>NP 080758.1</u>

 RefSeq Size:
 7130 bp

 RefSeq ORF:
 3663 bp

 Locus ID:
 67972

 UniProt ID:
 G5E829

 Cytogenetics:
 10 C3

**Gene Summary:** Catalyzes the hydrolysis of ATP coupled with the transport of calcium from the cytoplasm to

the extracellular space thereby maintaining intracellular calcium homeostasis

(PubMed:22311909, PubMed:16956963, PubMed:28827723, PubMed:26392310,

PubMed:29950683, PubMed:24805951, PubMed:23266958). Plays a role in blood pressure regulation through regulation of intracellular calcium concentration and nitric oxide production leading to regulation of vascular smooth muscle cells vasoconstriction (PubMed:24805951, PubMed:29950683, PubMed:22311909). Positively regulates bone mineralization through absorption of calcium from the intestine (PubMed:23266958, PubMed:26392310). Plays dual roles in osteoclast differentiation and survival by regulating RANKL-induced calcium oscillations in preosteoclasts and mediating calcium extrusion in

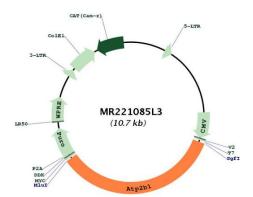
mature osteoclasts (PubMed:23266958). Regulates insulin sensitivity through

calcium/calmodulin signaling pathway by regulating AKT1 activation and NOS3 activation in

endothelial cells (By similarity).[UniProtKB/Swiss-Prot Function]



## **Product images:**



Circular map for MR221085L3