



**Protein Sequence:** >MR204262 protein sequence  
Red=Cloning site Green=Tags(s)

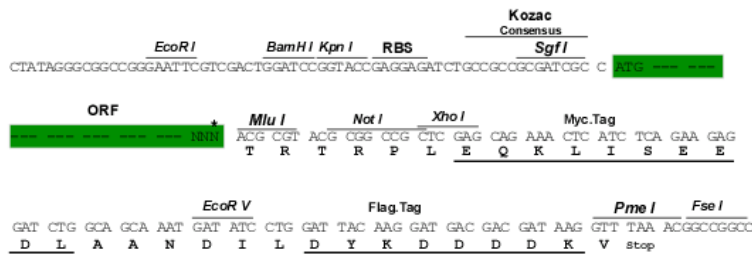
MARGKAKEEGSWKKFIWNSEKKEFLGRTGGSWFKILLFYVIFYGCLAGIFIGTIQVMLLTISELKPTYQD  
RVAPPGLTQIPQIQKTEISFRPNDPKSYEAYVLNIIRFLEKYKDSAQKDDMIFEDCGNVPSEPKERGDIN  
HERGERKVCRFKLDWLGNCGLNDDSYGYREGKPCIIIKLNRVLGFKPKPPKNESLETYPLMMKYNPNVL  
PVQCTGKRDEDKDKVGNIEYFGMGYYGFPLQYYPPYGKLLQPKYLQPLLAVQFTNLTVDTAIRVECKAY  
GENIGYSEKDRFQGRFDVKIEIKS

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\_009721

**ORF Size:** 915 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\\_009721.6](#)

**RefSeq Size:** 2590 bp

**RefSeq ORF:** 915 bp

**Locus ID:** 11931

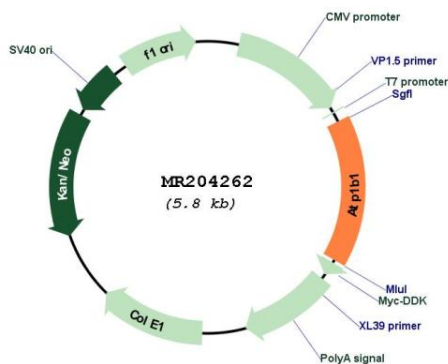
**UniProt ID:** [P14094](#)

**Cytogenetics:** 1 71.75 cM

**MW:** 35.2 kDa

**Gene Summary:** This gene encodes an integral membrane protein that comprises a subunit of an ATP-metabolizing enzyme responsible for transporting sodium and potassium ions across the plasma membrane. This enzyme regulates the electrochemical gradient of these ions in cells, and plays a central role in osmoregulation and signal transmission in nerves and muscles, among other biological processes. The encoded protein is the non-catalytic beta subunit; it works together with a catalytic alpha subunit and a gamma subunit. [provided by RefSeq, Mar 2013]

### Product images:



Circular map for MR204262