

Product datasheet for **RG236154**

ATPSCKMT (NM_001258389) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ATPSCKMT (NM_001258389) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ATPSCKMT
Synonyms: FAM173B; hFAM173B; JS-2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG236154 representing NM_001258389.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAGGGAGGAGGAGGTATACCCCTAGAACTTAAAGAAGAAAGTCAGTCAAGACATGTTCTACCT
GCAAGTTTTGAAGTCAACAGTTTGCAGAAAAGCAACTGGGGTCTTACTTACTGGGCTTGTGGTGGC
ACCCTGGTGGCTGTGTACGCTGTAGCCACGCCGTTTGTAAACGCCAGCCCTTCGAAAAGTCTGTTGCCG
TTTGTACCTGCAACTACGAAGCAGATTGAAAATGTTGTGAAAATGTTGCGATGCCGAAGAGGATCCCTT
GTGGACATCGGTAGTGGGACGGACGCATTGTCATAGCGGCTGCGAAGAAAGGTTACAGCAGTTGGT
TATGAATTAACCCATGGCTAGTTTGGTATTCCAGATACCGCGCTTGGCGAGAAGTTACTTTTTCGCA
GTACTCGAACGTTGTTATTTTCGGTGTGCCTCAGATGATGCTGCAGTTGGAGAAGAACT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG236154
Blue=ORF Red=Cloning site Green=Tag(s)

```
MEGGGGIPLLETLKEESQSRHVLPAFSEVNSLQKSNWGFLLTGLVGGTLVAVYAVATPFVTPALRKVCLP
FVPATTKQIENVKMLRCRRGSLVDIGSGDRIVIAAAKKGFTAVGYELNPWLWVYSRYRAWREGYFFA
VLERCYFRCASDDAAVGEET
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPYSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: SgfI-MluI

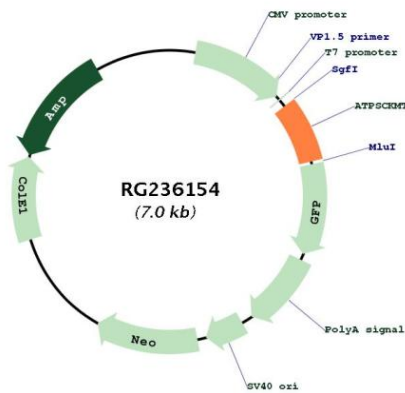


Cloning Scheme:


- ACCN:** NM_001258389
- ORF Size:** 474 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).
- RefSeq:** [NM_001258389.1](#), [NP_001245318.1](#)
- RefSeq Size:** 2628 bp
- RefSeq ORF:** 477 bp
- Locus ID:** 134145
- Cytogenetics:** 5p15.2
- Protein Families:** Druggable Genome, Transmembrane
- MW:** 17.8 kDa

Gene Summary:

Mitochondrial protein-lysine N-methyltransferase that trimethylates ATP synthase subunit C, ATP5MC1 and ATP5MC2. Trimethylation is required for proper incorporation of the C subunit into the ATP synthase complex and mitochondrial respiration (PubMed:29444090, PubMed:30530489). Promotes chronic pain (PubMed:29444090). Involved in persistent inflammatory and neuropathic pain: methyltransferase activity in the mitochondria of sensory neurons promotes chronic pain via a pathway that depends on the production of reactive oxygen species (ROS) and on the engagement of spinal cord microglia (PubMed:29444090).[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for RG236154