

Product datasheet for RC218224L3

OriGene Technologies, Inc.

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ATP5G3 (ATP5MC3) (NM_001002258) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ATP5G3 (ATP5MC3) (NM_001002258) Human Tagged Lenti ORF Clone

Tag:Myc-DDKSymbol:ATP5MC3

Synonyms: ATP5G3; P3

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(RC218224).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_001002258

ORF Size: 426 bp



ATP5G3 (ATP5MC3) (NM_001002258) Human Tagged Lenti ORF Clone - RC218224L3

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 001002258.1</u>

 RefSeq Size:
 979 bp

 RefSeq ORF:
 429 bp

 Locus ID:
 518

 UniProt ID:
 P48201

Cytogenetics: 2q31.1

Protein Families: Transmembrane

Protein Pathways: Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation,

Parkinson's disease

MW: 14.69 kDa

Gene Summary: This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase

catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multisubunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel seems to have nine subunits (a, b, c, d, e, f, g, F6 and 8). This gene is one of three genes that encode subunit c of the proton channel. Each of the three genes have distinct mitochondrial import sequences but encode the identical mature protein. Alternatively spliced transcript variants encoding different proteins have been identified. [provided by

RefSeq, Jun 2010]