

ATP synthase subunit a-2 (ATP6-2), Recombinant Protein

Cat *RP00393*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* ATP synthase subunit a-2 (ATP6-2)

Product Synonym Names

Recombinant ATP synthase subunit a-2 (ATP6-2); ATP synthase subunit a-2; F-ATPase protein 6 P6-2

Product Gene Name

atp6-2 recombinant protein

Product Synonym Gene Name

ATP6-2

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

SPLDQFEIVP LIPMHIGNFY FSFTNSSLFM LLTLSFFLLL IHFVTKKGGG NLVPNAWQSL VELLYDFVLN
LVKEQIGGLS GNVKQMFPPC ILVTFLFLF CNLQGMIPYS FTVTSHFLIT LALSFSIFIG ITIVGFQRHG
LHFFSFLPA GVPLPLAPFL VLLELISYCF RALSLGIRLF ANMMAGHSLV KILSGFAWTM LCMNDIFYFI
GALGPLFIVL ALTGLELGVA ILQAYVFTIL ICIYLNDAIN LH

Sequence Positions

98-349

Chromosome Location

Chromosome: MT; NC_001284.2 (296820..297869, complement)

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

39,729 Da

Storage

Store at -20°C. For extended storage, store at -20 or -80°C.

Protein Family

ATP synthase

NCBI Accession

NP_085569.1

NCBI GI

13449387

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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Cat *RP00393*

NCBI GenBank Nucleotide

NC_001284.2

NCBI GeneID

3890461

NCBI Official Full Name

ATPase subunit 6

NCBI Official Symbol

atp6-2

NCBI Protein Information

ATPase subunit 6

UniProt Gene Name

ATP6-2

UniProt Protein Name

ATP synthase subunit a-2

UniProt Synonym Protein Names

F-ATPase protein 6; P6-2

UniProt Entry Name

ATP62_ARATH

UniProt Primary Accession

P92547

UniProt Secondary Accession

Q1ZXW9

UniProt Comments

Function: Mitochondrial membrane ATP synthase (F1F0 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, F1 - containing the extramembraneous catalytic core and F0 - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F1 is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Key component of the proton channel; it may play a direct role in the translocation of protons across the membrane. By similarity. Subunit structure: F-type ATPases have 2 components, CF1 - the catalytic core - and CF0 - the membrane proton channel. CF1 has five subunits: alpha3, beta3, gamma1, delta1, epsilon1. CF0 has three main subunits: a, b and c. Subcellular location: Mitochondrion inner membrane; Multi-pass membrane protein. Miscellaneous: The atp6 gene is located on the border of one of the mitochondrial DNA repeats resulting in two identical copies of the mature protein with different propeptide extensions. Sequence similarities: Belongs to the ATPase A chain family. RNA editing: Edited at position 123.

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