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AR51336PU-S Human ATP5F1 (83-256, His-tag) - Purified

Alternate names: ATP synthase F(0) complex subunit B1, ATP synthase proton-transporting

mitochondrial F(0) complex subunit B1, ATP synthase subunit b, mitochondrial ATP

synthase subunit b

Quantity: 0.1 mg

Concentration: 0.5 mg/ml (determined by Bradford assay)

Background: ATP5F1 is 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 multi-subunit 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).

Uniprot ID: <u>P24539</u>
NCBI: <u>NP 001679</u>

GeneID: 515

Species: Human Source: E. coli

Format: State: Liquid purified protein

Purity: >80% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

Description: Recombinant human ATP5F1 protein, fused to His-tag at N-terminus, was expressed in

E.coli.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MGSLILYALS KEIYVISAET FTALSVLGVM VYGIKKYGPF VADFADKLNE QKLAQLEEAK QASIQHIQNA IDTEKSQQAL VQKRHYLFDV QRNNIAMALE VTYRERLYRV YKEVKNRLDY HISVQNMMRR KEQEHMINWV EKHVVQSIST QQEKETIAKC

IADLKLLAKK AQAQPVM

Molecular weight: 22.6 kDa (197aa)

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: Higuti T., et al. (1991) Biochem. Biophys. Res. Commun. 178:1014-1020

Choudhary C., et al. (2009) Science. 325:834-840



Pictures:

