

# Product information



## ATP5F1, 83-256aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP2516

**Full name:** ATP synthase subunit b

**NCBI Accession No.:** NP\_001679

**Synonyms:** PIG47

**Description:** 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). Recombinant human ATP5F1 protein, fused to His-tag at N-terminus, was expressed in *E.coli*.

<p><b>Form:</b> Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol</p> <p><b>Molecular Weight:</b> 22.6 kDa (197aa)</p> <p><b>Purity:</b> &gt; 80% by SDS - PAGE</p> <p><b>Concentration:</b> 0.5 mg/ml (determined by Bradford assay)</p>	<p>(kDa) 70 57 40 28 18 13.5 8.5</p> <p>15% SDS-PAGE (3ug)</p>
<p><b>Sequences of amino acids:</b></p> <p><u>MGSSHHHHHH</u> <u>SSGLVPRGSH</u> <u>MGSL</u>ILYALS KEIYVISAET FTALSVLGVM VYGIKYGPF VADFADKLENE QKLAQLEEAK QASIQHIQNA IDTEKSQQAL VQKRHYLFDV QRNNIAMALE VTYRERLYRV YKEVKNRLDY HISVQNMMRR KEQEHMINWV EKHVVQSIST QQEKETIAKC IADLKLLAKK AQAQPVM</p>	

### General references:

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

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

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.

Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

Immuno-Biological Laboratories, Inc. (IBL-America)  
8201 Central Ave. NE, Suite P, Minneapolis, Minnesota 55432, USA  
Phone: (888) 523-1246 Fax.: (763) 780-2988  
Email: [info@ibl-america.com](mailto:info@ibl-america.com) Web: [www.ibl-america.com](http://www.ibl-america.com)