

Product information

ATP5D, 23-168aa

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

Cat. No. IBATGP1099

Full name: ATP synthase subunit delta, mitochondrial

NCBI Accession No.: NP_001678

Synonyms: F-ATPase delta subunit

Description: ATP5D, also known as F-ATPase delta subunit, 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, F_o, 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 consists of three main subunits (a, b, c). This protein is the delta subunit of the catalytic core. Alternatively spliced transcript variants encoding the same isoform have been identified. Recombinant human ATP5D protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography.

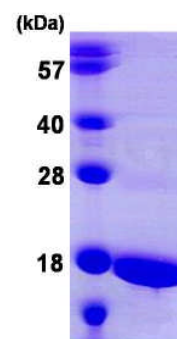
Form: Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol,

0.1M NaCl

Molecular Weight: 17.3 kDa (167aa), confirmed by MALDI-TOF

Purity: > 95% by SDS - PAGE

Concentration: 0.25 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MAEAAAAPAA ASGPNQMSFT FASPTQVFFN GANVRQVDVP TLTGAFGILA AHVPTLQVLR PGLVVVHAED GTTSKYFVSS GSIAVNADSS VQLLAEAAVT LDMLDLGAAK ANLEKAQAEI VGTADATRA EIQRIEANE ALVKALE

General references:

Jordan E.M., *et al.* (1992) *Biochim. Biophys. Acta* 1130:123-126

Grimwood J., *et al.* (2004) *Nature*. 428:529-535

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.