

Recombinant Mouse Atp5b, His-tagged

Cat. No. Atp5b-3710M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	ATP synthase subunit beta, mitochondrial (Atp5b)
Species	Mouse
Source	E.Coli/Yeast
ProteinLength	529
Description	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. Subunits alpha and beta form the catalytic core in F1. Rotation of the central stalk against the surrounding alpha3beta3 subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.
Form	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.
Purity	>90%(SDS-PAGE)
Notes	Small volumes of Atp5b recombinant protein may occasionally become entrapped in

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the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container's cap. Certain products may require to ship with dry ice.

Storage

Store at -20 degree C. For extended storage, store at -20 or -80 degree C. Notes: Repeated freezing and thawing is not recommended. Store working aliquots at 4 deg. C for up to one week.

Storage Buffer

PBS pH 7.4, 50% glycerol

Warning

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GENE INFORMATION

Gene Name

Atp5b ATP synthase, H⁺ transporting mitochondrial F1 complex, beta subunit [*Mus musculus*]

Official Symbol

Atp5b

Synonyms

ATP5B; ATP synthase, H⁺ transporting mitochondrial F1 complex, beta subunit; ATP synthase subunit beta, mitochondrial; mitochondrial ATP synthase, H⁺ transporting F1 complex beta subunit; ATP synthase, H⁺ transporting mitochondrial F1 complex, alpha subunit;

Gene ID

11947

mRNA Refseq

NM_016774

Protein Refseq

NP_058054

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Chromosome Location	10 D3; 10
Pathway	Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem; Electron Transport Chain, organism-specific biosystem; F-type ATPase, eukaryotes, organism-specific biosystem; Formation of ATP by chemiosmotic coupling, organism-sp
Function	ATP binding; ATPase activity; MHC class I protein binding; calcium ion binding; eukaryotic cell surface binding; hydrogen ion transporting ATP synthase activity, rotational mechanism; hydrogen-exporting ATPase activity, phosphorylative mechanism; hydrolase activity; hydrolase activity, acting on acid anhydrides, catalyzing transmembrane movement of substances; lipoprotein particle receptor activity; nucleoside-triphosphatase activity; nucleotide binding; proton-transporting ATPase activity, rotational mechanism;

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