

## Anti-ATP5B monoclonal antibody, clone 8F4G3 (DCABH-275)

This product is for research use only and is not intended for diagnostic use.

## **PRODUCT INFORMATION**

Product Overview	Mouse monoclonal to ATPB
Antigen Description	Mitochondrial membrane ATP synthase (F(1)F(0) 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, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Subunits alpha and beta form the catalytic core in F(1). Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.
Immunogen	Native E. coli ATPB.
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Escherichia coli
Clone	8F4G3
Purification	The purity of This antibody is near homogeneity, as judged by SDS-PAGE. The antibody was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
Conjugate	Unconjugated
Applications	WB

Positive Control	Isolated mitochondria from Human heart, bovine heart, rat heart, mouse heart, and HepG2 cells.
Format	Liquid
Size	100 µg
Buffer	Preservative: 0.02% Sodium azide; Constituent: HBS
Preservative	0.02% Sodium Azide
Storage	Store at +4°C. Do not freeze.

## **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;
Entrez Gene ID	<u>11947</u>
Protein Refseq	<u>NP_058054</u>
UniProt ID	<u>P56480</u>
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-specific biosystem; Huntingtons disease, organism-specific biosystem; Huntingtons disease, conserved biosystem;
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;