



Anti-ATP5A1 monoclonal antibody (DCABH-10671)

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

PRODUCT INFORMATION

Antigen Description	This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, using 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 consists of three main subunits (a, b, c). This gene encodes the alpha subunit of the catalytic core. Alternatively spliced transcript variants encoding the same protein have been identified. Pseudogenes of this gene are located on chromosomes 9, 2, and 16.
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Immunogen	A synthetic peptide of human ATP5A1 is used for rabbit immunization.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Protein A
Conjugate	Unconjugated
Applications	Western Blot (Transfected lysate); ELISA
Buffer	In 1x PBS, pH 7.4
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	ATP5A1 ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle [Homo sapiens]
Official Symbol	ATP5A1
Synonyms	ATP5A1; ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit 1, cardiac muscle; ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit, isoform 1, cardiac muscle , ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit, isoform 2, non cardiac muscle like 2 , ATP5AL2, ATPM; ATP synthase subunit alpha, mitochondrial; ATP5A; hATP1; OMR; ORM; ATP sythase (F1-ATPase) alpha subunit; ATP synthase alpha chain, mitochondrial; mitochondrial ATP synthetase, oligomycin-resistant; ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit, isoform 1, cardiac muscle; ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit, isoform 2, non-cardiac muscle-like 2; ATPM; MOM2; ATP5AL2;
Entrez Gene ID	498
Protein Refseq	NP_001001935
UniProt ID	P25705
Chromosome Location	18q21
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	ADP binding; ATP binding; contributes_to ATPase activity; MHC class I protein binding; eukaryotic cell surface binding; hydrogen ion transporting ATP synthase activity, rotational mechanism; hydrolase activity, acting on acid anhydrides, catalyzing transm