



Mouse Anti-ATP8 monoclonal antibody, clone 2H4-2I22-2D4 (CABT-RM171)

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

PRODUCT INFORMATION

Specificity	Specifically detects human mitochondrial ATPsynthase protein 8 (ATP8).
Target	ATP8
Immunogen	A synthetic peptide corresponding to the N-terminus of human mitochondrial ATP8.
Isotype	IgG2b, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	2H4-2I22-2D4
Purification	Protein L
Conjugate	unconjugated
Applications	WB
Molecular Weight	~9.8 kDa observed; 8.0 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 µg
Buffer	150 mM NaCl, 15 mM HEPES, pH 7.5
Preservative	0.02% sodium azide.

Storage

Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction

ATP synthase protein 8 is encoded by the MT-ATP8 gene in human. ATP8 is a single-pass inner mitochondrial membrane protein whose transmembrane domain is localized to amino acids 8-24. It is an F-type ATPase that produces ATP from ADP in the presence of a protein gradient across the membrane which is generated by electron transport complexes of the respiratory chain. It is responsible for the final step in oxidative phosphorylation and in the electron transport chain. F-type ATPases consist of an F1-containing extramembranous catalytic core and an F0-containing the membrane proton channel. They are 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. Mutations in MT-ATP8 gene are reported to cause the deficiency of mitochondrial complex V that leads to heterogeneous clinical manifestations, including neuropathy, ataxia, and hypertrophic cardiomyopathy.

Keywords

ATP8; ATP synthase protein 8; A6L; ATPASE8; MTATP8; F-ATPase subunit 8

GENE INFORMATION

Entrez Gene ID

[4509](#)

UniProt ID

[P03928](#)
