

Product datasheet

Anti-ATP5H antibody [10G5AB2] ab173006

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Overview

Product name	Anti-ATP5H antibody [10G5AB2]
Description	Mouse monoclonal [10G5AB2] to ATP5H
Host species	Mouse
Tested applications	Suitable for: WB, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Cow, Human, African green monkey
Immunogen	Full length native protein (purified). This information is considered to be commercially sensitive.
Positive control	Human, Rat, Mouse and Bovine Heart Homogenates; HeLa, HepG2, H4IIE, MEF, NIH-3T3 and COS7 cell lysates; HDFn cells; HeLa cells.
General notes	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.5 Preservative: 0.02% Sodium azide Constituent: 99% HEPES buffered saline
Clonality	Monoclonal
Clone number	10G5AB2
Isotype	IgG1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab173006 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.5 µg/ml. Predicted molecular weight: 18 kDa.
ICC/IF		Use a concentration of 1 µg/ml.
Flow Cyt		Use a concentration of 1 µg/ml. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function

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. Part of the complex F(0) domain and the peripheral stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6 static relative to the rotary elements.

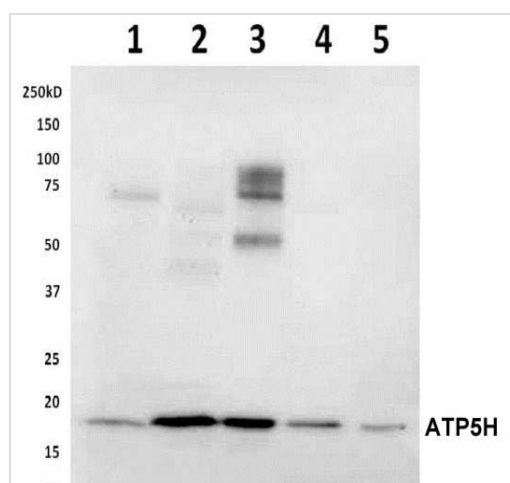
Sequence similarities

Belongs to the ATPase d subunit family.

Cellular localization

Mitochondrion. Mitochondrion inner membrane.

Images



Western blot - Anti-ATP5H antibody [10G5AB2] (ab173006)

All lanes : Anti-ATP5H antibody [10G5AB2] (ab173006) at 0.200000002980232 µg/ml

Lane 1 : Human Heart Homogenate at 20 µg

Lane 2 : Rat Heart Homogenate at 20 µg

Lane 3 : Mouse Heart Homogenate at 20 µg

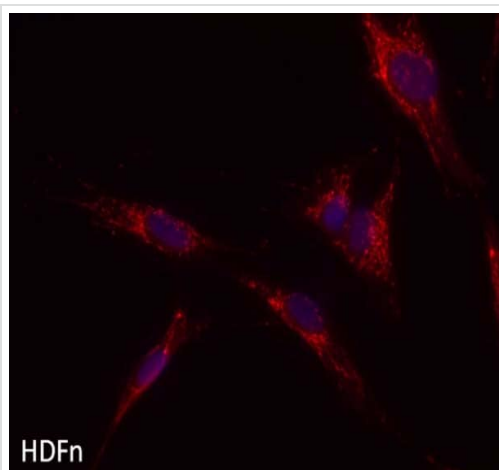
Lane 4 : Bovine Heart Homogenate at 15 µg

Lane 5 : HeLa cell lysate at 20 µg

Secondary

All lanes : Goat polyclonal to Mouse IgG - HRP at 1/5000 dilution

Predicted band size: 18 kDa



Immunocytochemistry/ Immunofluorescence - Anti-ATP5H antibody [10G5AB2] (ab173006)

Immunocytochemistry with HDFn cells stained with ab173006 (red) and DAPI (blue).

Fixation: Paraformaldehyde fixed (4%, 20 min).

Used heated antigen retrieval for optimal signal.

Permeabilization: Triton X-100 permeabilized (0.1%, 10min).

Blocking: 10% Goat Serum/PBS (1 hour).

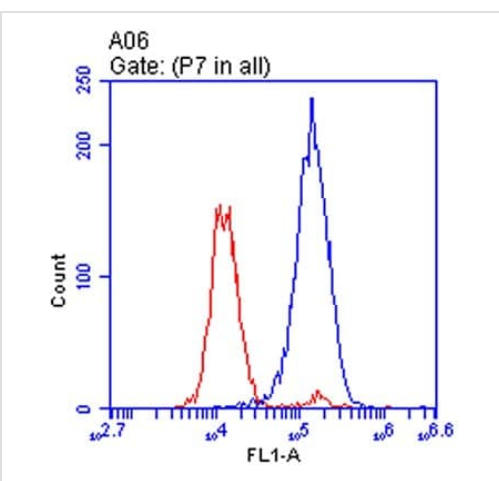
Primary: ab173006 5 µg/ml (10% Goat Serum/PBS, 2hr at room temperature or over night at 4°C).

Secondary: Alexa Fluor® 594 goat anti-mouse H+L used at a 1/1000 dilution in 1% Goat Serum/PBS for 1hr at RT.

Washing: 3X 1% Goat Serum/PBS, 10 mins/wash.

DAPI: 2 µM in 1% Goat Serum/PBS, 10 mins.

The target protein locates to the mitochondria (red).



Flow Cytometry - Anti-ATP5H antibody [10G5AB2] (ab173006)

Flow Cytometry with HeLa cells stained with ab173006 (blue) and isotype-specific negative control (red).

Fixation: Paraformaldehyde fixed (4%, 15 min).

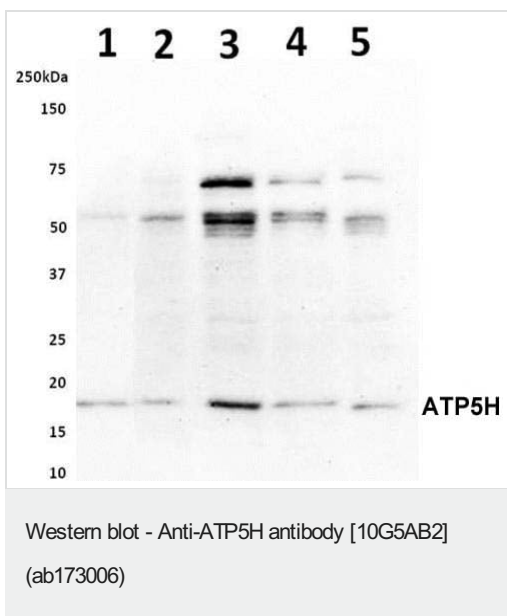
Permeabilization: Methanol permeabilized (90%, @ -20°C for >30 min).

Blocking: 1% BSA /PBS (20 min).

Primary: ab173006 0.5 µg/ml in 1% BSA/PBS, 1hr at room temperature.

Secondary: Alexa Fluor® 488 goat anti-mouse IgG1 used at a 1/1000 dilution in 1% BSA/PBS for 30 min at RT.

Washing: 2x 1% BSA/PBS.



All lanes : Anti-ATP5H antibody [10G5AB2] (ab173006) at 0.5 µg/ml

Lane 1 : HepG2 cell lysate at 20 µg

Lane 2 : H4IIE cell lysate at 20 µg

Lane 3 : MEF cell lysate at 20 µg

Lane 4 : NIH-3T3 cell lysate at 20 µg

Lane 5 : COS7 cell lysate at 10 µg

Secondary

All lanes : Goat polyclonal to Mouse IgG - HRP at 1/5000 dilution

Predicted band size: 18 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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