ATP Synthase beta Monoclonal Antibody (4.3E8.D10)

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Rabbit, Rat, Human, Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	4.3E8.D10
Conjugate	Unconjugated
Immunogen	Intact rat mitochondria.
Form	Liquid
Concentration	1 mg/mL
Purification	purified
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2227740

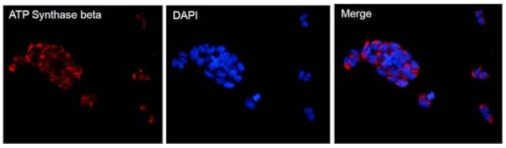
Applications	Tested Dilution	Publications
Western Blot (WB)	1-2 µg/mL	4 Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	1:100-1:1,000	6 Publications
Immunoprecipitation (IP)	2-5 µg	-

Product Specific Information

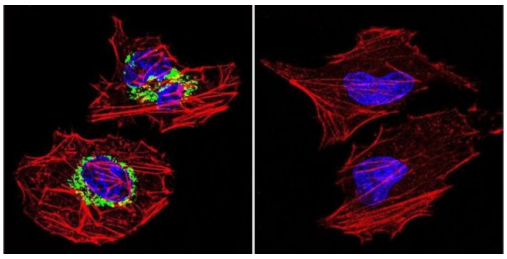
MA1-930 detects the beta subunit of ATP synthase from mouse rat and human samples. This antibody is useful as a mitochondrial marker.

MA1-930 has been successfully used in immunofluorescence, western blot, and immunoprecipitation procedures. By immunoprecipitation, this antibody detects an 50 kDa protein representing ATP synthase from solubilized rat brain mitochondria.

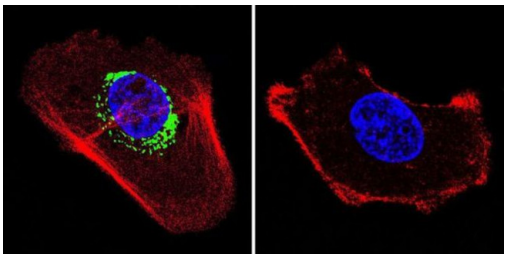
Product Images For ATP Synthase beta Monoclonal Antibody (4.3E8.D10)



ATP Synthase beta Antibody (MA1-930) in ICC/IF
Immunofluorescent analysis of ATP Synthase beta (red) in HEK293T cells. Cells fixed with 4% formaldehyde were permeabilized and blocked with 1X PBS containing 5% BSA and 0.3% Triton X-100 for 1 hour at room temperature. Cells were probed with an ATP Synthase beta monoclonal antibody (Product # MA1-930) at a dilution of 1:100 overnight at 4°C in 1X PBS containing 1% BSA and 0.3% Triton X-100, washed with 1X PBS, and incubated with a fluorophore-conjugated goat anti-mouse IgG secondary antibody at a dilution of 1:200 for 1 hour at room temperature. Nuclei (blue) were stained with DAPI. Images were taken on a Leica DM1000 microscope at 40X magnification. Data courtesy of the Innovators Program.



ATP Synthase beta Antibody (MA1-930) in ICC/IF
Immunofluorescent analysis of ATP Synthase beta in HeLa cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a ATP Synthase beta monoclonal antibody (Product # MA1-930) at a dilution of 1:200 overnight at 4 C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503). ATP Synthase beta staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.



ATP Synthase beta Antibody (MA1-930) in ICC/IF
Immunofluorescent analysis of ATP Synthase beta in A431 cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a ATP Synthase beta monoclonal antibody (Product # MA1-930) at a dilution of 1:200 overnight at 4 C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503). ATP Synthase beta staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Images were taken at 60X magnification.

View more figures on thermofisher.com

11 References

Western Blot (4)

The Journal of biological chemistry

ACE overexpression in myeloid cells increases oxidative metabolism and cellular ATP.

"MA1-930 was used in Western Blotting to find that ACE overexpression by both macrophages and neutrophils is associated with a marked change in the metabolism of cells and that this appears to underpin some of the phenotypic differences between these cells and myeloid cells expressing WT levels of ACE."

Authors: Cao DY,Spivia WR,Veiras LC,Khan Z,Peng Z,Jones AE,Bernstein EA,Saito S,Okwan-Duodu D,Parker SJ, Giani JF,Divakaruni AS,Van Eyk JE,Bernstein KE

Year
2020

Species
Mouse

FEMS microbiology letters

Human brain endothelial ATP synthase beta-subunit is mannose-insensitive binding target of FimH.

"MA1-930 was used in western blot to investigate the molecular mechanism for the binding of E.coli to human brain microvascular endothelial cells"

Authors: Shin S,Kim KS

Year
2010

Species
Human

View more WB references on thermofisher.com

Immunohistochemistry (1)

The Journal of clinical investigation

PINK1 deficiency impairs mitochondrial homeostasis and promotes lung fibrosis.

"MA1-930 was used in immunohistochemistry to study the contribution of mitochondrial function to idiopathic pulmonary fibrosis pathogenesis."

Authors: Bueno M,Lai YC,Romero Y,Brands J,St Croix CM,Kamga C,Corey C,Herazo-Maya JD,Sembrat J,Lee JS, Duncan SR,Rojas M,Shiva S,Chu CT,Mora AL

Year
2015

Species
Mouse

Immunocytochemistry (6)

Journal of immunology (Baltimore, Md. : 1950)

Metabolic Adaptation of Macrophages as Mechanism of Defense against Crystalline Silica.

"MA1-930 was used in Immunocytochemistry to highlight the importance of complex II activity and tricarboxylic acid cycle remodeling to macrophage survival and cytokine-mediated inflammation in silicosis."

Authors: Marrocco A,Frawley K,Pearce LL,Peterson J,O'Brien JP,Mullett SJ,Wendell SG,St Croix CM,Mischler SE,Ortiz LA

Year
2021

Species
Mouse

View more ICC/IF references on thermofisher.com

More applications with references on thermofisher.com