

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

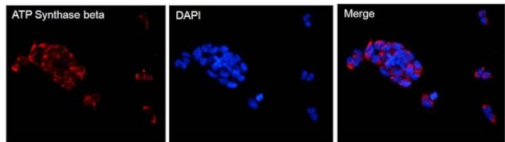
MA1-930 detects the beta subunit of ATP synthase from mouse rat and human samples. This antibody is useful as a mitochondrial marker.

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)

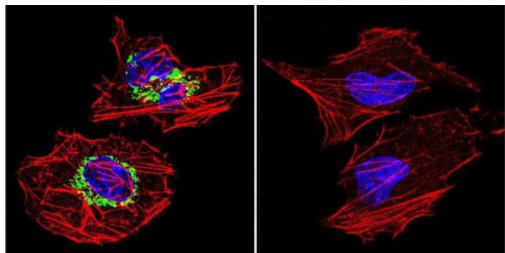
ATP Synthase beta Antibody (MA1-930) in ICC/IF

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.



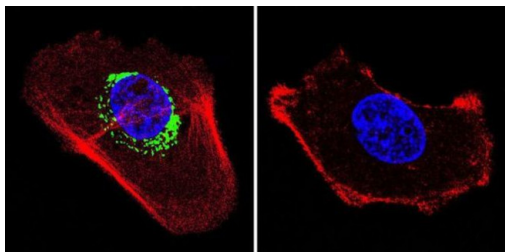
ATP Synthase beta Antibody (MA1-930) in ICC/IF

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](#)

Western Blot (4)

<p>The Journal of biological chemistry</p> <p>ACE overexpression in myeloid cells increases oxidative metabolism and cellular ATP.</p> <p>"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."</p> <p>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</p>	<p>Year 2020</p> <p>Species Mouse</p>
<p>FEMS microbiology letters</p> <p>Human brain endothelial ATP synthase beta-subunit is mannose-insensitive binding target of FimH.</p> <p>"MA1-930 was used in western blot to investigate the molecular mechanism for the binding of E.coli to human brain microvascular endothelial cells"</p> <p>Authors: Shin S,Kim KS</p>	<p>Year 2010</p> <p>Species Human</p>

View more WB references on thermofisher.com

Immunohistochemistry (1)

<p>The Journal of clinical investigation</p> <p>PINK1 deficiency impairs mitochondrial homeostasis and promotes lung fibrosis.</p> <p>"Published figure using ATP Synthase beta monoclonal antibody (Product # MA1-930) in Immunofluorescence"</p> <p>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</p>	<p>Year 2015</p> <p>Species Mouse</p>
---	---

Immunocytochemistry (6)

<p>Journal of immunology (Baltimore, Md. : 1950)</p> <p>Metabolic Adaptation of Macrophages as Mechanism of Defense against Crystalline Silica.</p> <p>"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."</p> <p>Authors: Marrocco A,Frawley K,Pearce LL,Peterson J,O'Brien JP,Mullett SJ,Wendell SG,St Croix CM,Mischler SE,Ortiz LA</p>	<p>Year 2021</p> <p>Species Mouse</p>
--	---

View more ICC/IF references on thermofisher.com

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.