abcam

ab92824

Anti-Mitochondria antibody [113-1] - BSA and Azide free

Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824) is a mouse monoclonal antibody provided in a PBS only buffer for easy conjugation detecting Mitochondria in **Western Blot, Flow Cytometry, IHC-P, ICC/IF**. Suitable for **Human**.

- BSA, sodium azide, and glycerol-free for easy conjugation
- Over 80 publications
- Trusted since 2010

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing Human Mitochondria protein. The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	113-1
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/100
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Mouse
Dilution info	-
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Species	Rat
Dilution info	-
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/800
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information Human Mitochondria

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Storage information	Stable for 12 months at -20°C

Notes

Product Specifications
Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824) is a mouse monoclonal antibody provided in a carrier-free, conjugation ready format.
ab92824 is validated in Flow Cyt, ICC/IF, IHC-P, WBin human samples.
Carrier-free antibodies are compatible with our best-in-class range of Lightning-Link® conjugation kits.
Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824) specifically detects mitochondria and is sold in 100 µL selling sizes.

Quality and Validation
Antibody clone 113-1 has been cited over 87 times in peer reviewed journals and is trusted by the scientific community.
Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824) has 9 independent reviews from customers.

This antibody is an excellent marker for Human cells in xenographic model research.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

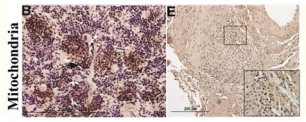
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

6 product images



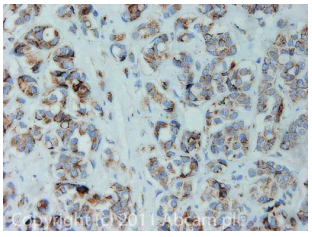
Chen, H. et al PLoS One. 2015 Feb 6;10(2):e0115482. doi: 10.1371/journal.pone.0115482. eCollection 2015 Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824)

Immunostained human cells in spleen and temporal artery (TA) xenograft sections demonstrate persistent human PBMC colonization at 28 days
Mitochondria in spleen (B) and temporal artery xenografts (E) were detected using ab92824 at 1/400 dilution in immunohistochemical analysis.

Magnification: 400X for spleen, 200X for TA grafts and 800X for insets.

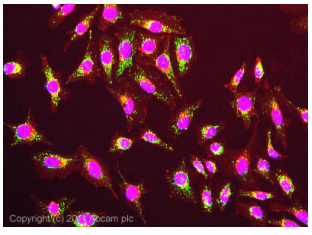
(From Figure 2 of Chen et al)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824)

Mitochondria Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Mitochondria antibody

IHC image of ab92824 staining in Breast Cancer formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab92824, 1/1000 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunocytochemistry/ Immunofluorescence - Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824)

Mitochondria Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Mitochondria antibody

ICC/IF image of ab92824 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab92824, 5µg/ml) overnight at +4°C. The secondary antibody (green) was ab96879, DyLight® 488 goat anti-mouse IgG (H+L) used at a 1/250 dilution for 1h.Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

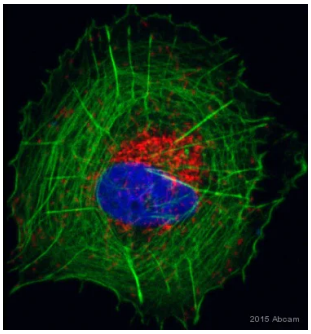
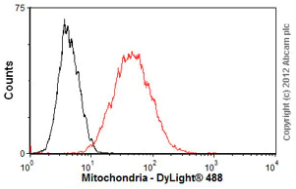


Image is courtesy of Virginia Hoglund

Immunocytochemistry/ Immunofluorescence - Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824)

Mitochondria Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Mitochondria antibody

ab92824 staining mitochondria in the Human U87 glioblastoma cell by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 10% NBF, permeabilized with Triton X-100 and blocked with 2% serum for 90 minutes at 22°C. Samples were incubated with primary antibody (1/1000 in 0.2% BSA + 2% NGS) for 15 hours at 4°C. An Alexa Fluor® 568-conjugated Goat anti-mouse IgG1 polyclonal was used as the secondary antibody (1/500). Co stained with ActinGreen, 2 drops/ml PBS, 10 min and Hoechst 2ug/ml in H2O 10 min



Flow Cytometry - Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824)

Mitochondria Flow Cytometry staining using mouse Anti-Mitochondria antibody

Overlay histogram showing HepG2 cells stained with ab92824 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab92824, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was Mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HepG2 cells fixed with 4% paraformaldehyde (10 min) permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

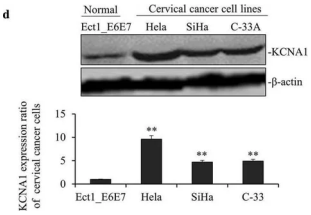


Image collected and cropped by CiteAb under a CC-BY license from the publication

Western blot - Anti-Mitochondria antibody [113-1] - BSA and Azide free (ab92824)

Mitochondria western blot using anti-Mitochondria antibody [113-1] - BSA and Azide free ab92824. Publication image and figure legend from Liu, L., Chen, Y., et al., 2019, Channels (Austin), PubMed 31354026.

ab92824 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for ab92824 please see the product overview.

KCNA1 was highly expressed in cervical cancer tissues and cell lines and correlates with poor prognosis. a. The heat map showing the high-rich expression of KCNA1 in 20 cervical cancer patient tissues compared with adjacent non-tumor tissues ($p < 0.01$). b. The mRNA levels of KCNA1 were higher (ratio >2) in 17/20 representative cervical cancer patient tissues than in adjacent non-tumor tissues by PCR. c. The patient number and survival months were calculated with different KCNA1 expression (KCNA1 ratio from 1–2.9; 3–6.9 and >7) (**$p < 0.01$ compared with KCNA1 ratio 1–2.9 group). Meanwhile, the percentages of stage IV (%) in different KCNA1 expression (KCNA1 ratio from 1–2.9; 3–6.9 and >7) were calculated. d. The KCNA1 protein levels in 3 cervical cancer cell lines were normalized to the β-actin protein level and plotted. The data were shown as mean ± S.D. Quantitation by densitometry was shown on below ($P < 0.01$, $n = 16$, compared with normal human cervical epithelial cell line-Ect/E6E7). Three independent experiments were repeated.

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