

Acetylcholinesterase Monoclonal Antibody (HR2)

Product Details	
Size	200 µL
Species Reactivity	Bovine, Cat, Guinea pig, Human, Mouse, Rabbit
Published Species	Non-human primate, Human, Mouse, Guinea pig
Host/Isotype	Mouse / IgG2b
Class	Monoclonal
Type	Antibody
Clone	HR2
Conjugate	Unconjugated
Immunogen	Purified human cerebellar acetylcholinesterase.
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_325478

Applications	Tested Dilution	Publications
Western Blot (WB)	-	4 Publications
Immunohistochemistry (IHC)	-	8 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:20-1:200	-
Immunohistochemistry (Frozen) (IHC (F))	1:50	-
Immunocytochemistry (ICC/IF)	1:100-1:1,000	2 Publications
ELISA (ELISA)	Assay-dependent	1 Publication
Immunoprecipitation (IP)	Assay-dependent	1 Publication

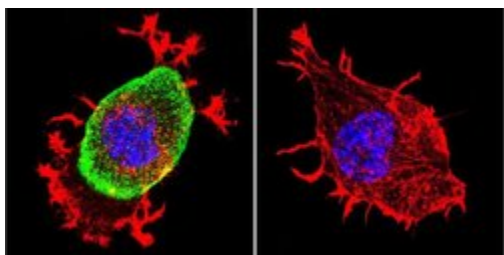
Product Specific Information

MA3-042 detects acetylcholinesterase (AChE) from human, mouse, rabbit, guinea pig, bovine and cat tissues. This antibody does not cross react with rat or frog AChE, and does not detect butyrylcholinesterase (BChE).

MA3-042 has been successfully used in immunohistochemistry, immunoprecipitation and ELISA procedures. This antibody cannot be used in Western blot to detect AChE. Immunohistochemical staining of AChE in human brain samples with MA3-042 results in staining of nerve fibers and terminals.

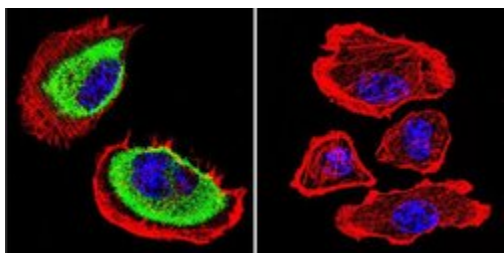
The MA3-042 antigen is purified human cerebellar acetylcholinesterase.

Product Images For Acetylcholinesterase Monoclonal Antibody (HR2)



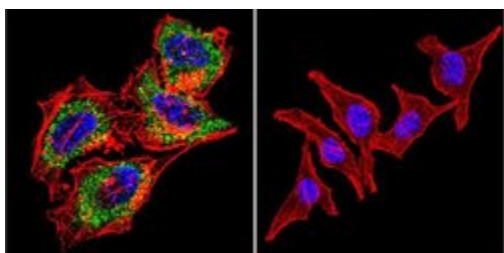
Acetylcholinesterase Antibody (MA3-042) in ICC/IF

Immunofluorescent analysis of Acetylcholinesterase using Anti-Acetylcholinesterase Monoclonal Antibody (HR2) (Product # MA3-042) shows staining in Neuro-2a Cells. Acetylcholinesterase staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Acetylcholinesterase (Product # MA3-042) at a dilution of 1:200 over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503, Goat Anti-Mouse). Images were taken at 60X magnification.



Acetylcholinesterase Antibody (MA3-042) in ICC/IF

Immunofluorescent analysis of Acetylcholinesterase using Anti-Acetylcholinesterase Monoclonal Antibody (HR2) (Product # MA3-042) shows staining in U251 Cells. Acetylcholinesterase staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Acetylcholinesterase (Product # MA3-042) at a dilution of 1:200 over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503, Goat Anti-Mouse). Images were taken at 60X magnification.



Acetylcholinesterase Antibody (MA3-042) in ICC/IF

Immunofluorescent analysis of Acetylcholinesterase using Anti-Acetylcholinesterase Monoclonal Antibody (HR2) (Product # MA3-042) shows staining in Hela Cells. Acetylcholinesterase staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing Acetylcholinesterase (Product # MA3-042) at a dilution of 1:200 over night at 4°C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody (Product # 35503, Goat Anti-Mouse). Images were taken at 60X magnification.

[View more figures on thermofisher.com](http://thermofisher.com)

16 References

Western Blot (4)

Chemical research in toxicology

Immunopurification of Acetylcholinesterase from Red Blood Cells for Detection of Nerve Agent Exposure.

"MA3-042 was used in Western Blotting to develop a method of immunopurifying human red blood cell acetylcholinesterase in quantities adequate for detecting exposure to nerve agents and organophosphorus pesticides, by mass spectrometry."

Authors: Dafferner AJ, Schopfer LM, Xiao G, Cashman JR, Yerramalla U, Johnson RC, Blake TA, Lockridge O

Species
Human

Dilution
Not Cited

Year
2017

PLoS one

Altered levels of acetylcholinesterase in Alzheimer plasma.

"MA3-042 was used in immunoprecipitation to investigate the changes of acetylcholinesterase level in Alzheimer plasma"

Authors: García-Ayllón MS, Riba-Llena I, Serra-Basante C, Alom J, Boopathy R, Sáez-Valero J

Species
Human

Dilution
Not Cited

Year
2010

[View more WB references on thermofisher.com](#)

Immunohistochemistry (8)

PLoS pathogens

Cross-talk between microglia and neurons regulates HIV latency.

"Published figure using Acetylcholinesterase monoclonal antibody (Product # MA3-042) in Immunofluorescence"

Authors: Alvarez-Carbonell D, Ye F, Ramanath N, Garcia-Mesa Y, Knapp PE, Hauser KF, Karn J

Species
Human

Dilution
Not Cited

Year
2019

Arteriosclerosis, thrombosis, and vascular biology

Adventitial Cell Atlas of wt (Wild Type) and ApoE (Apolipoprotein E)-Deficient Mice Defined by Single-Cell RNA Sequencing.

"MA3-042 was used in Immunohistochemistry-immunofluorescence to study the role of the cellular atlas of the heterogeneous adventitial cells, and the intracellular communication, in atherosclerosis."

Authors: Gu W, Ni Z, Tan YQ, Deng J, Zhang SJ, Lv ZC, Wang XJ, Chen T, Zhang Z, Hu Y, Jing ZC, Xu Q

Species
Mouse

Dilution
Not Cited

Year
2019

[View more IHC references on thermofisher.com](#)

More applications with references on thermofisher.com

ICC/IF (2)

ELISA (1)

IP (1)

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.