10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACHE Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7853a

Product Information

Application	IHC-P, FC, IF, WB, E
Primary Accession	P22303
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	67796
Antigen Region	147-175

Additional Information

Gene ID	43
Other Names	Acetylcholinesterase, AChE, ACHE
Target/Specificity	This ACHE antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 147-175 amino acids from the N-terminal region of human ACHE.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ACHE Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ACHE (HGNC:108)
Function	Hydrolyzes rapidly the acetylcholine neurotransmitter released into the synaptic cleft allowing to terminate the signal transduction at the neuromuscular junction. Role in neuronal apoptosis.
Cellular Location	Synapse. Secreted. Cell membrane; Peripheral membrane protein [Isoform

H]: Cell membrane; Lipid- anchor, GPI-anchor; Extracellular side

Tissue Location Isoform H is highly expressed in erythrocytes.

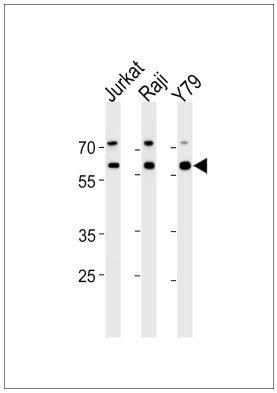
Background

Acetylcholinesterase hydrolyzes the neurotransmitter, acetylcholine at neuromuscular junctions and brain cholinergic synapses, and thus terminates signal transmission. The Protein is also found on the red blood cell membranes, where it constitutes the Yt blood group antigen. Acetylcholinesterase exists in multiple molecular forms which possess similar catalytic properties, but differ in their oligomeric assembly and mode of cell attachment to the cell surface. The major form of acetylcholinesterase found in brain, muscle and other tissues is the hydrophilic species, which forms disulfide-linked oligomers with collagenous, or lipid-containing structural subunits.

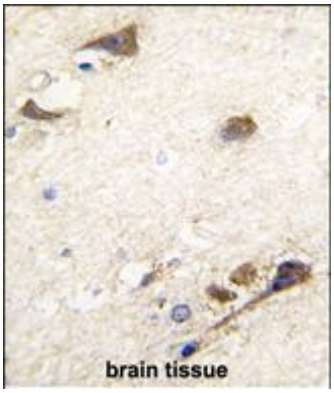
References

Liang,D., FEBS J. 276 (1), 94-108 (2009)
Scacchi,R., Am. J. Med. Genet. B Neuropsychiatr. Genet. (2008)

Images

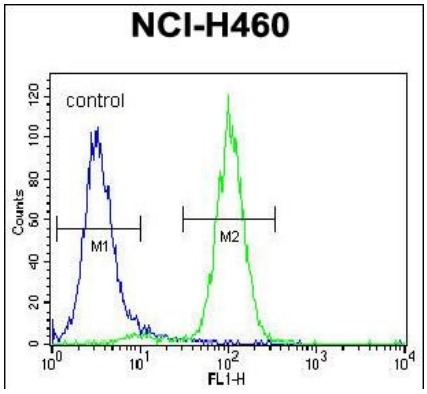


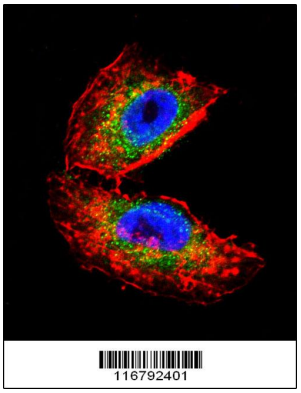
ACHE Antibody (N-term) (Cat. #AP7853a) western blot analysis in Jurkat,Raji,Y79 cell line lysates (35ug/lane).This demonstrates the ACHE antibody detected the ACHE protein (arrow).



Formalin-fixed and paraffin-embedded human brain tissue reacted with ACHE antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ACHE Antibody (N-term) (Cat. #AP7853a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.





Confocal immunofluorescent analysis of ACHE Antibody (N-term)(Cat#AP7853a) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.