

ACHE Antibody (NT)
Rabbit Polyclonal Antibody
Catalog # ABV11256**Specification**

ACHE Antibody (NT) - Product Information

Application	WB, IHC, IF, FC
Primary Accession	P22303
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

ACHE Antibody (NT) - Additional Information**Gene ID 43**

Positive Control	Western blot: Jurkat, Raji and Y79 cell lysate, IHC: human brain tissue, IF: NCI-H460 cells, FACS: NCI-H460 cells
Application & Usage	Western blot: ~1:1000, FACS: ~1:10-1:50, IHC: ~1:10-1:50, IF: 1:10-1:50.

Other Names

ACHE; Acetylcholinesterase

Target/Specificity

ACHE

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µl of antibody in PBS with 0.09% (W/V) sodium azide

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

ACHE Antibody (NT) is for research use only and not for use in diagnostic or therapeutic procedures.

ACHE Antibody (NT) - 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

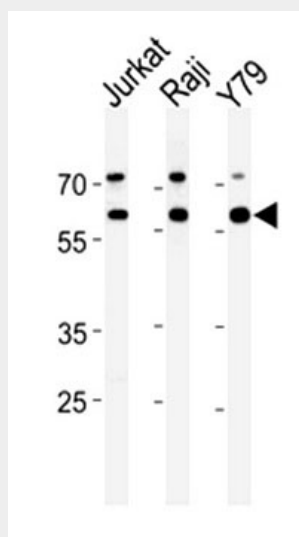
Isoform H is highly expressed in erythrocytes.

ACHE Antibody (NT) - Protocols

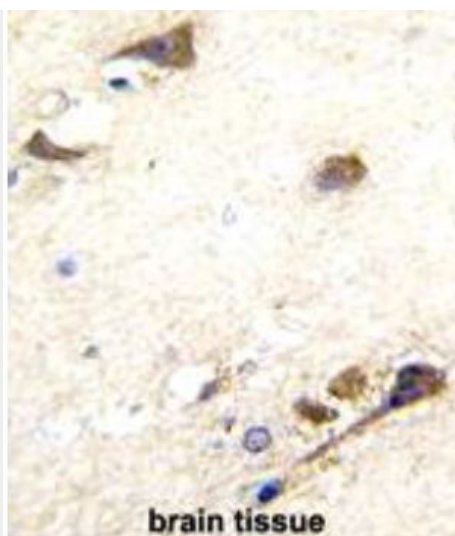
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

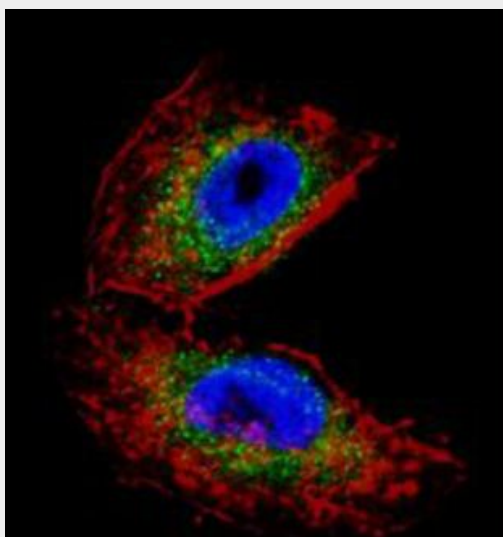
ACHE Antibody (NT) - Images



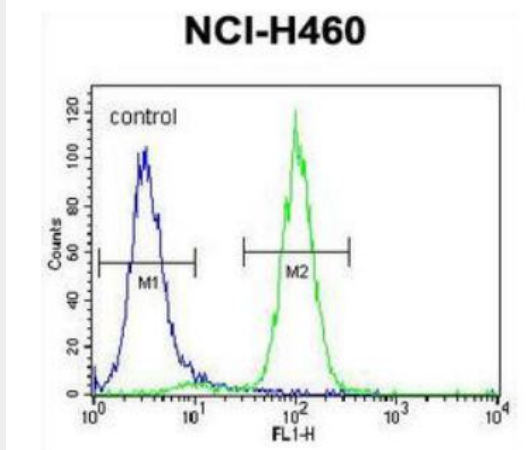
ACHE Antibody (N-term) western blot analysis in Jurkat, Raji, Y79 cell line lysates (35 µg/lane). This demonstrates the ACHE antibody detected the ACHE protein (arrow).



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.



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



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

ACHE Antibody (NT) - Background

Acetylcholinesterase (AChE) hydrolyzes acetylcholine at synaptic junctions. Alternative mRNA splicing gives rise to three forms of AChE. It plays a role in neuronal apoptosis. The T form, also known as the asymmetric form, is soluble and is present in synapses. The H form is also known as the globular form and is present on the outer surfaces of cell membranes. The R form is not known to be a functional species. AChE globular form subunits are GPI-anchored to cell membranes and asymmetric subunits are anchored to basal lamina components by a collagen tail. The catalytic subunits of AChE are oligomers composed of disulfide-linked homodimers. The loss of AChE from cholinergic and noncholinergic neurons in the brain is seen in patients with Alzheimer's disease. However, AChE activity is increased around amyloid plaques, which may be due to a disturbance in calcium homeostasis involving the opening of L-type voltage-dependent calcium channels.