

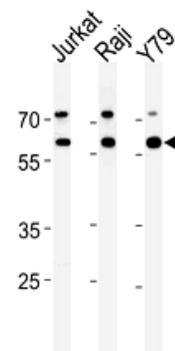
# AChE Antibody (NT)

<b>ALTERNATE NAMES:</b>	ACHE; Acetylcholinesterase
<b>CATALOG #:</b>	6706-100
<b>AMOUNT:</b>	100 µl
<b>HOST/ISOTYPE:</b>	Rabbit IgG
<b>IMMUNOGEN:</b>	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.
<b>PURIFICATION:</b>	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
<b>MOLECULAR WEIGHT:</b>	~67.8 kDa
<b>FORM:</b>	Liquid
<b>FORMULATION:</b>	Supplied in PBS with 0.09% (W/V) sodium azide.
<b>SPECIES REACTIVITY:</b>	Human
<b>STORAGE CONDITIONS:</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

**DESCRIPTION:** 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.

**APPLICATION:** Western blot: ~1:1000, FACS: ~1:10–1:50, IHC: ~1:10-1:50, IF: 1:10-1:50.

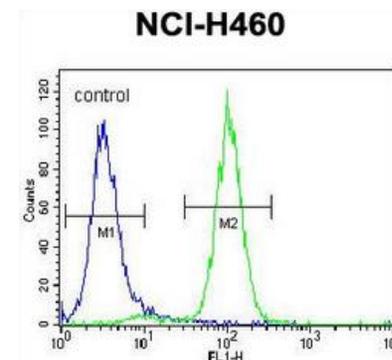
**Note:** This information is only intended as a guide. The optimal dilutions must be determined by the user.



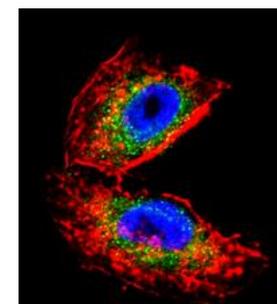
AChE Antibody (N-term) (Cat # 6706-100) western blot analysis in Jurkat, Raji, Y79 cell line lysates (35 µg/lane). This demonstrates the ACHE antibody detected the ACHE protein (arrow).



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.



AChE Antibody (N-term) (Cat. # 6706-100) 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.



Confocal immunofluorescent analysis of AChE Antibody (N-term) (Cat#6706-100) 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).

**RELATED PRODUCTS:**

- ACHE Antibody (CT) (Cat. No. 6707-100)

**FOR RESEARCH USE ONLY! Not to be used on humans.**