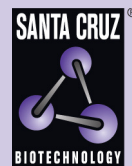


# AChE (H-134): sc-11409



The Power to Question

## BACKGROUND

Acetylcholinesterase (AChE) hydrolyzes acetylcholine at synaptic junctions. Alternative mRNA splicing gives rise to three forms of AChE. 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.

## CHROMOSOMAL LOCATION

Genetic locus: ACHE (human) mapping to 7q22.1; Ache (mouse) mapping to 5 G2.

## SOURCE

AChE (H-134) is a rabbit polyclonal antibody raised against amino acids 481-614 mapping at the C-terminus of AChE of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

AChE (H-134) is recommended for detection of AChE of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

AChE (H-134) is also recommended for detection of AChE in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for AChE siRNA (h): sc-29628, AChE siRNA (m): sc-29629, AChE shRNA Plasmid (h): sc-29628-SH, AChE shRNA Plasmid (m): sc-29629-SH, AChE shRNA (h) Lentiviral Particles: sc-29628-V and AChE shRNA (m) Lentiviral Particles: sc-29629-V.

Molecular Weight (predicted) of AChE: 68 kDa.

Molecular Weight (observed) of average AChE: 71 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, PC-12 cell lysate: sc-2250 or NIH/3T3 whole cell lysate: sc-2210.

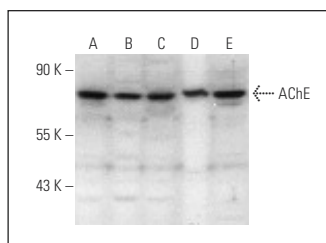
## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

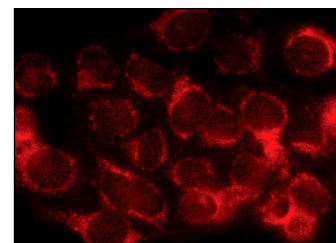
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



AChE (H-134): sc-11409. Western blot analysis of AChE expression in HeLa (A), Ramos (B), HuT 78 (C), PC-12 (D) and NIH/3T3 (E) whole cell lysates.



AChE (H-134): sc-11409. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cytoplasmic localization.

## SELECT PRODUCT CITATIONS

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## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **AChE (A-11): sc-373901**, our highly recommended monoclonal alternative to AChE (H-134).