

Product Name: ACHE Mouse Monoclonal Antibody**Catalog #: AMM82940**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,FC
Reactivity	Human, Mouse, Monkey, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,FC 1:200-1:400
Molecular Weight	67.8kDa

Antigen Information

Gene Name	ACHE
Alternative Names	YT; ACEE; ARACHE; N-ACHE
Gene ID	43.0
SwissProt ID	P22303
Immunogen	Purified recombinant fragment of human ACHE expressed in E. Coli.

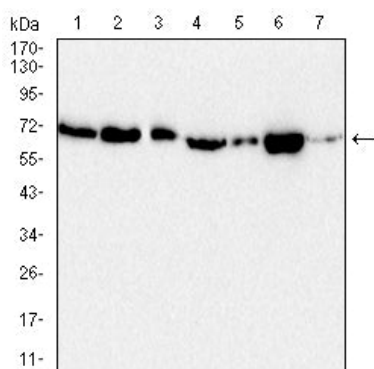
Background

Acetylcholinesterase hydrolyzes the neurotransmitter, acetylcholine at neuromuscular junctions and brain cholinergic synapses, and thus terminates signal transmission. It 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

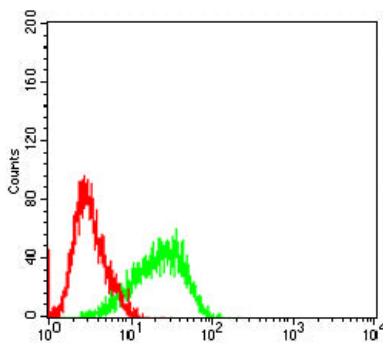
differ in their oligomeric assembly and mode of cell attachment to the cell surface. It is encoded by the single AChE gene, and the structural diversity in the gene products arises from alternative mRNA splicing, and post-translational associations of catalytic and structural subunits. The major form 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. The other, alternatively spliced form, expressed primarily in the erythroid tissues, differs at the C-terminal end, and contains a cleavable hydrophobic peptide with a GPI-anchor site. It associates with the membranes through the phosphoinositide (PI) moieties added post-translationally. AChE activity may constitute a sensitive biomarker of RBC ageing in vivo, and thus, may be of aid in understanding the effects of transfusion.

Research Area

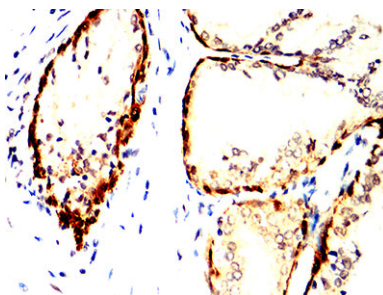
Image Data



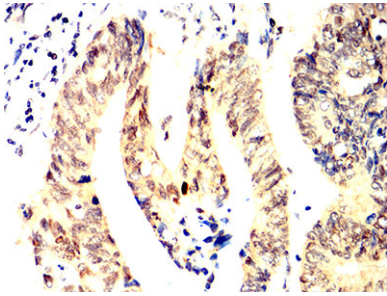
Western blot analysis using AChE mouse mAb against PC-12 (1), Hela (2), mouse brain (3), NIH/3T3 (4), COS7 (5), Jurkat (6) and Raji (7) cell lysate.



Flow cytometric analysis of NIH/3T3 cells using AChE mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human prostate cancer tissues using AChE mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human rectum cancer tissues using ACHE mouse mAb with DAB staining.