

Anti-ACHE Picoband Antibody

Catalog # ABO12107

Product Information

Application	WB
Primary Accession	P22303
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Acetylcholinesterase(ACHE) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	43
Other Names	Acetylcholinesterase, AChE, 3.1.1.7, ACHE
Calculated MW	67796
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Cell junction, synapse . Secreted . Cell membrane ; Peripheral membrane protein .
Tissue Specificity	Isoform H is highly expressed in erythrocytes. .
Source	Eukaryota
Protein Name	Acetylcholinesterase
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ACHE (592-614aa SSYMVHWKNQFDHYSKQDRCSDL), different from the related mouse and rat sequences by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the type-B carboxylesterase/lipase family.

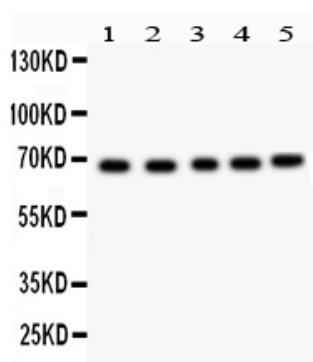
Protein Information

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

ACHE is also known as Acetylcholinesterase. And 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.

Images



Anti- ACHE Picoband antibody, ABO12107, Western blotting
All lanes: Anti ACHE (ABO12107) at 0.5ug/ml
Lane 1: Rat Kidney Tissue Lysate at 50ug
Lane 2: Mouse Liver Tissue Lysate at 50ug
Lane 3: HELA Whole Cell Lysate at 40ug
Lane 4: PANC Whole Cell Lysate at 40ug
Lane 5: COLO320 Whole Cell Lysate at 40ug
Predicted bind size: 68KD
Observed bind size: 68KD

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