

Anti-ACHE Picoband Antibody

Catalog # ABO12107

Specification

Anti-ACHE Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP22303HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Acetylcholinesterase(ACHE) detection. Tested with WB inHuman;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ACHE Picoband Antibody - Additional Information

Gene ID 43

Other Names Acetylcholinesterase, AChE, 3.1.1.7, ACHE

Calculated MW 67796 MW KDa

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. .

Protein Name Acetylcholinesterase

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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 r°Constitution, 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.

Anti-ACHE Picoband Antibody - 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.

Anti-ACHE Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ACHE Picoband Antibody - Images





Anti- ACHE Picoband antibody, ABO12107, Western blottingAll lanes: Anti ACHE (ABO12107) at 0.5ug/mlLane 1: Rat Kidney Tissue Lysate at 50ugLane 2: Mouse Liver Tissue Lysate at 50ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: PANC Whole Cell Lysate at 40ugLane 5: COLO320 Whole Cell Lysate at 40ugPredicted bind size: 68KDObserved bind size: 68KD

Anti-ACHE Picoband Antibody - 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.