

**Anti-ACHE Picoband Antibody**  
Catalog # ABO12107**Specification**

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**Anti-ACHE Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P22303</a>
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.

**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<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**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.

### 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

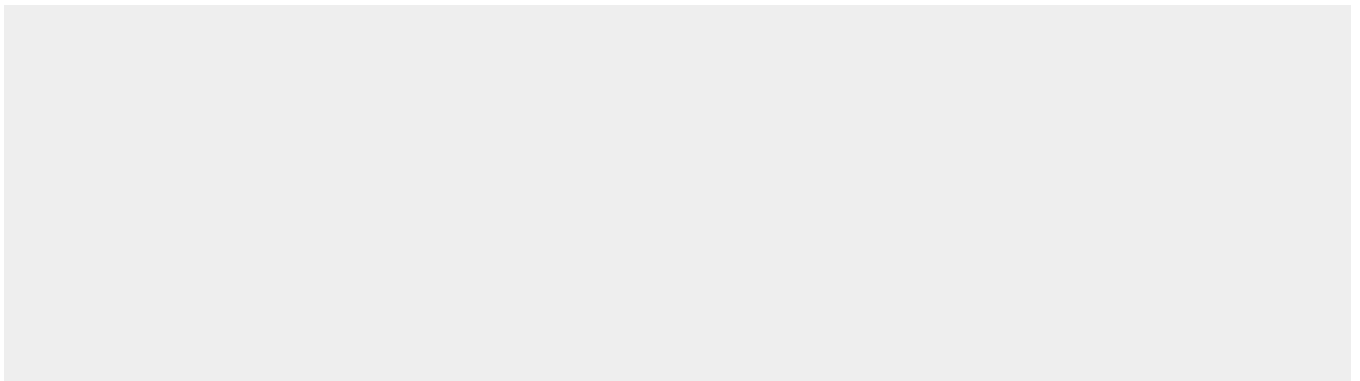
Isoform H is highly expressed in erythrocytes.

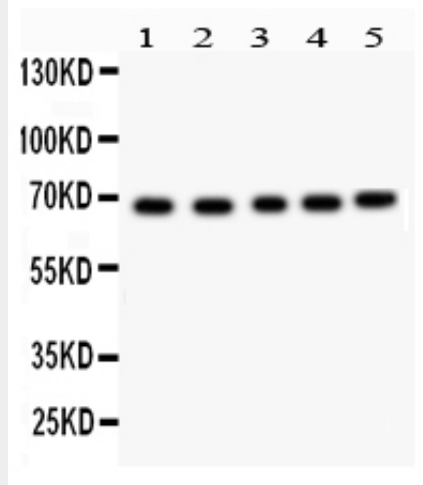
### Anti-ACHE Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-ACHE Picoband Antibody - 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

#### **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.