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Goat Anti-ACHE Antibody

Peptide-affinity purified goat antibody

Catalog # AF1017a

Specification

Goat Anti-ACHE Antibody - Product Information

Application	**WB, IF, FC**
Primary Accession	P22303
Other Accession	NP_000656, 43
Reactivity	**Human**
Predicted	**Mouse, Rat, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**67796**

Goat Anti-ACHE Antibody - Additional Information

Gene ID 43

Other Names
Acetylcholinesterase, AChE, 3.1.1.7, ACHE

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-ACHE Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ACHE 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.

Goat Anti-ACHE Antibody - Protocols

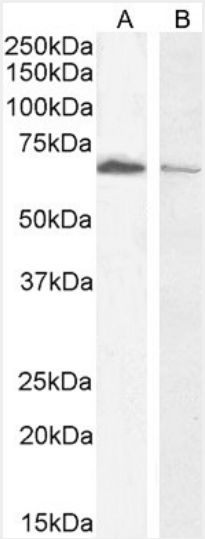
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-ACHE Antibody - Images

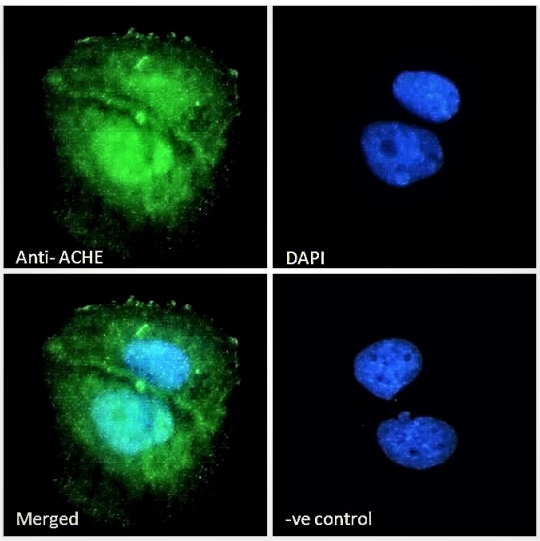


AF1017a (1 µg/ml) staining of Human Cerebellum lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

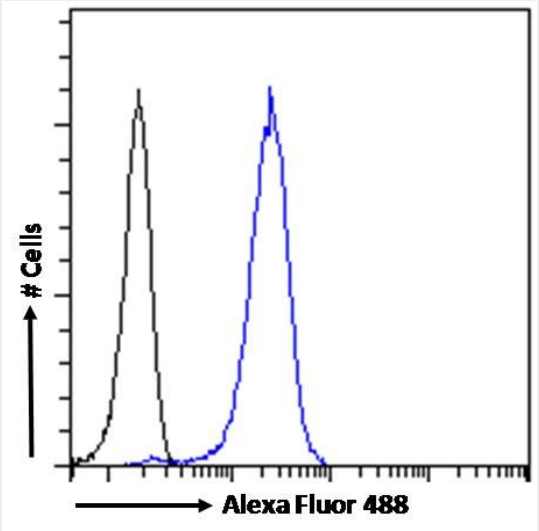


EB06659 (0.3µg/ml) staining of Jurkat (A) and (0.5ug/ml) HepG2 (B) cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

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EB06659 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing nuclear, membrane and cytoplasmic staining. The nu



EB06659 Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) f

Goat Anti-ACHE Antibody - 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.

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Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Physiogenomic analysis of statin-treated patients: domain-specific counter effects within the ACACB gene on low-density lipoprotein cholesterol? Rua□o G, et al. Pharmacogenomics, 2010 Jul. PMID 20602615.
Evaluation of Candidate Genes for Cholinesterase Activity in Farmworkers Exposed to Organophosphorous Pesticides - Association of SNPs in BCHE. Howard TD, et al. Environ Health Perspect, 2010 Jun 8. PMID 20529763.
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