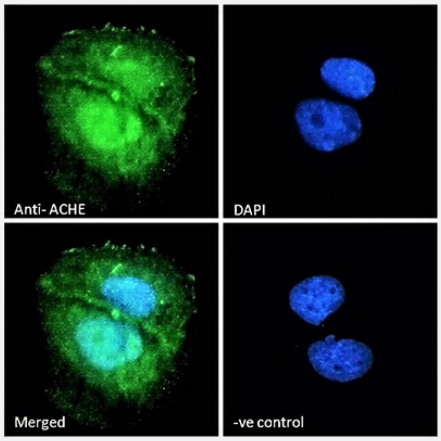
ACHE polyclonal antibody

Catalog # PAB6747 Size 100 ug

Applications

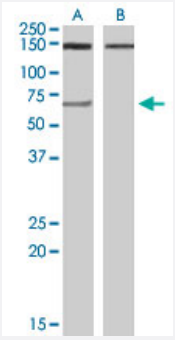


Immunofluorescence

PAB6747 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1µ (10 µg/mL) followed by Alexa Fluor 488 secondary antibody (2 µg/ml), showing nuclear, membrane and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 µg/mL) followed by Alexa Fluor 488 secondary antibody (2 µg/mL).

Flow Cytometry

PAB6747 Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (1 ug/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.



Western Blot (Tissue lysate)

ACHE polyclonal antibody (Cat # PAB6747) (0.3 ug/mL) staining of human brain (Hippocampus) lysate (35 ug protein in RIPA buffer) with (A) and without (B) blocking with the immunising peptide. Primary incubation was 1 hour. Detected by chemiluminescence.

Specification

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Product Description	Goat polyclonal antibody raised against synthetic peptide of ACHE.
Immunogen	A synthetic peptide corresponding to human ACHE.
Sequence	QFDHYSKQDRCSDL
Host	Goat
Theoretical MW (kDa)	67.8
Reactivity	Human
Specificity	This antibody is expected to recognize isoform NP_000656 only (the ubiquitously expressed, hydrophillic form).
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:32000) Flow Cytometry (10 µg/mL) Immunofluorescence (10 ug/mL) Western Blot (0.3-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunofluorescence

PAB6747 Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1µ (10 µg/mL) followed by Alexa Fluor 488 secondary antibody (2 µg/ml), showing nuclear, membrane and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 µg/mL) followed by Alexa Fluor 488 secondary antibody (2 µg/mL).

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- Enzyme-linked Immunoabsorbent Assay

- Western Blot (Tissue lysate)

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Gene Info — ACHE

Entrez GeneID	43
Protein Accession#	NP_000656.1
Gene Name	ACHE
Gene Alias	ARACHE, N-ACHE, YT
Gene Description	acetylcholinesterase (Yt blood group)
Omim ID	100740 112100
Gene Ontology	Hyperlink
Gene Summary	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. [provided by RefSeq
Other Designations	acetylcholinesterase|apoptosis-related acetylcholinesterase

Publication Reference

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- Cholinergic imbalance in the multiple sclerosis hippocampus.

  Kooi EJ, Prins M, Bajic N, Belien JA, Gerritsen WH, van Horssen J, Aronica E, van Dam AM, Hoozemans JJ, Francis PT, van der Valk P, Geurts JJ.

  Acta Neuropathologica 2011 Sep; 122(3):313.

  Application: WB-Ti, Human, Hippocampus

- The intact human acetylcholinesterase C-terminal oligomerization domain is alpha-helical in situ and in isolation, but a shorter fragment forms beta-sheet-rich amyloid fibrils and protofibrillar oligomers.

  Cottingham MG, Voskuil JL, Vaux DJ.

  Biochemistry 2003 Sep; 42(36):10863.

  Application: Dot, ELISA, IP, WB-Tr, Human, HEK 293 cells

Pathway

- Glycerophospholipid metabolism

Disease

- Abortion
- Alzheimer disease
- Cardiovascular Diseases
- Cognition
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Hypercholesterolemia
- Mental Disorders
- Schizophrenia
- Schizophrenic Psychology
- Thyroid Neoplasms
- Weight Gain

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