

Product datasheet for **TA302997**

Acetylcholinesterase (ACHE) Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, IF, WB
Recommended Dilution:	ELISA: 1:64,000. WB: 0.3-1 µg/ml.
Reactivity:	Human (Expected from sequence similarity: Mouse, Rat, Cow)
Host:	Goat
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Peptide with sequence QFDHYSKQDRCS DL, from the C Terminus of the protein sequence according to NP_000656.1.
Formulation:	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.
Concentration:	lot specific
Purification:	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide. Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	acetylcholinesterase (Cartwright blood group)
Database Link:	NP_000656 Entrez Gene 11423 Mouse Entrez Gene 83817 Rat Entrez Gene 43 Human P22303



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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. [provided by RefSeq]

Synonyms:

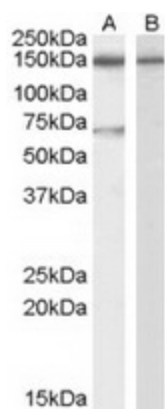
ACEE; ARACHE; N-ACHE; YT

Protein Families:

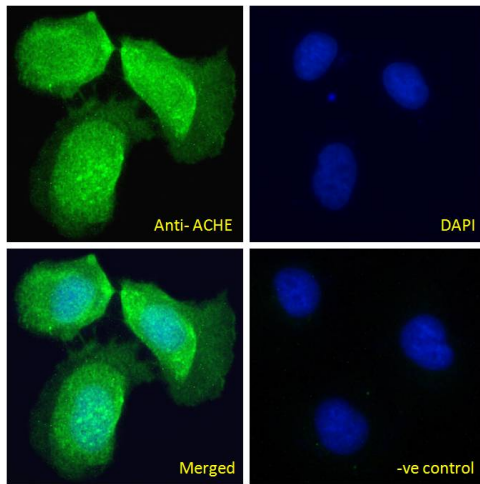
Druggable Genome

Protein Pathways:

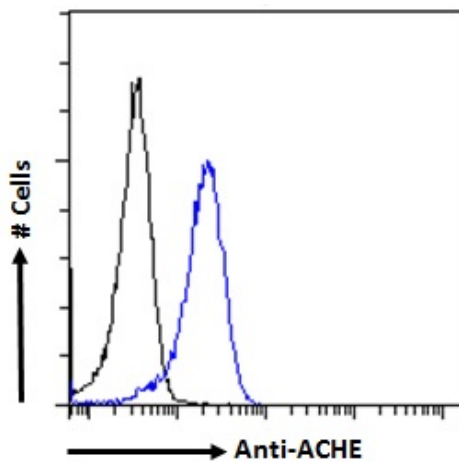
Glycerophospholipid metabolism

Product images:

TA302997 (0.3ug/ml) staining of Human Brain (Hippocampus) lysate (35ug protein in RIPA buffer) with (B) and without (A) blocking with the immunising peptide. Primary incubation was 1 hour. Detected by chemiluminescence.



Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (4ug/ml), showing cytoplasmic and nuclear/Vesicle staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (4ug/ml).



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 (2ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.