

## **Product datasheet for TA373191S**

### OriGene Technologies, Inc.

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# **Acetylcholinesterase (ACHE) Rabbit Polyclonal Antibody**

#### **Product data:**

Product Type: Primary Antibodies

Applications: ELISA, ICC/IF, WB

Recommended Dilution: WB.1:500 - 1:2000

IF/ICC,1:50 - 1:200

ELISA, Recommended starting concentration is 1 µg/mL. Please optimize the concentration

based on your specific assay requirements.

Reactivity: Human, Mouse, Rat

Modifications: Unmodified

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Formulation:** Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

**Concentration:** lot specific

**Purification:** Affinity purification

**Conjugation:** Unconjugated

**Storage:** Store at -20°C. Avoid freeze / thaw cycles.

**Stability:** Shelf life: one year from despatch.

Predicted Protein Size: 68kDa

**Gene Name:** acetylcholinesterase (Cartwright blood group)

**Database Link:** Entrez Gene 43 Human

P22303





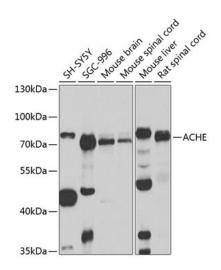
#### Background:

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. AChE activity may constitute a sensitive biomarker of RBC ageing in vivo, and thus, may be of aid in understanding the effects of transfusion

Synonyms:

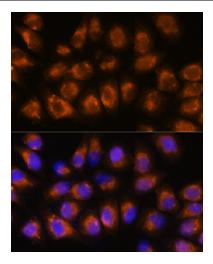
acetylcholinesterase; ARACHE; N-ACHE; OTTHUMP00000211347; OTTHUMP00000211349; OTTHUMP00000211356; YT

## **Product images:**

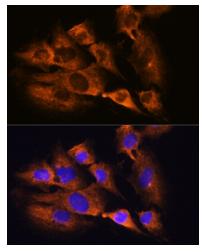


Western blot analysis of various lysates using ACHE Rabbit pAb ([TA373191]) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit lgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 90s.

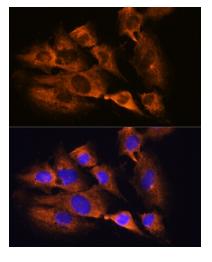




Immunofluorescence analysis of NIH/3T3 cells using ACHE Rabbit pAb ([TA373191]) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using ACHE Rabbit pAb ([TA373191]) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of C6 cells using ACHE Rabbit pAb ([TA373191]) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.