

## Product datasheet for AP20787PU-M

## OriGene Technologies, Inc.

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

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

**Immunohistochemistry on Paraffin Sections:** 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 560-600 of Human AChE.

**Specificity:** This antibody detects endogenous levels of AChE I protein.

(region surrounding Lys585)

**Formulation:** Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% by SDS-PAGE)

Preservative: 0.05% Sodium Azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

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

**Predicted Protein Size:** ~ 70 kDa

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

Database Link: Entrez Gene 11423 MouseEntrez Gene 83817 RatEntrez Gene 43 Human

P22303





#### Background:

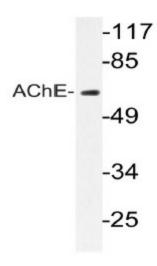
Acetylcholinesterase (AChE) hydrolyzes acetylcholine at synaptic junctions. Alternative mRNA splicing gives rise to three forms of AChE. The T form, also known as the asymmetric form, is soluble and is present in synapses. The H form is also known as the globular form and is present on the outer surfaces of cell membranes. The R form is not known to be a functional species. AChE globular form subunits are GPI-anchored to cell membranes and asymmetric subunits are anchored to basal lamina components by a collagen tail. The catalytic subunits of AChE are oligomers composed of disulfide-linked homodimers. The loss of AChE from cholinergic and noncholinergic neurons in the brain is seen in patients with Alzheimer's disease. However, AChE activity is increased around amyloid plaques, which may be due to a disturbance in calcium homeostasis involving the opening of L-type voltage-dependent calcium channels.

**Synonyms:** AChE, Acetylcholine Esterase, Acetylcholine-Esterase

**Protein Families:** Druggable Genome

**Protein Pathways:** Glycerophospholipid metabolism

## **Product images:**



Western blot (WB) analyzes of AChE antibody (Cat.-No.: [AP20787PU-N]) in extracts from Jurkat cells.