

Rat acetylcholinesterase (Yt blood group) ELISA Kit | ACHE elisa kit

Rat Acetylcholinesterase, AChE ELISA Kit

CATALOG #
AAA79899

REACTIVITY
Rat

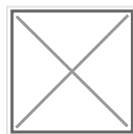
PRODUCT SYNONYMS

acetylcholinesterase (Yt blood group); Rat Acetylcholinesterase; AChE ELISA Kit; ARACHE; N-ACHE; YT; OTTHUMP00000211347; OTTHUMP00000211349; OTTHUMP00000211356; acetylcholinesterase; apoptosis-related acetylcholinesterase; ACHE elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of Rat ACHE. No significant cross-reactivity or interference between Rat ACHE and analogues was observed.
Sequence Length	584
Samples	Serum, plasma, tissue homogenates
Detection Range	7.8pg/ml-500 pg/ml
Sensitivity	1.95 pg/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Protein Biological Process 1	Neurobiology
Protein Biological Process 3	Neurotransmitter degradation
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for ACHE elisa kit

Introduction: In biochemistry, cholinesterase is an enzyme that catalyzes the hydrolysis of the neurotransmitter acetylcholine into choline and acetic acid, a reaction necessary to allow a cholinergic neuron to return to its resting state after activation. Acetylcholinesterase (AChE), also known as RBC cholinesterase, erythrocyte cholinesterase, or (most formally) acetylcholine acetylhydrolase, found primarily in the blood and neural synapses. 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. Acetylcholinesterase is the target of nerve gases. The agents blocks the function of acetylcholinesterase and thus causes interminable muscle contraction throughout the body.

Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to AChE. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for AChE and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain AChE, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of AChE in the samples is then determined by comparing the O.D. of the samples to the standard curve.

NCBI AND UNIPROT INFORMATION

NCBI GI #	2494388
UniProt Accession #	Q29499
Molecular Weight	64,630 Da
NCBI Official Full Name	Acetylcholinesterase
UniProt Protein Name	Acetylcholinesterase
UniProt Gene Name	ACHE
UniProt Synonym Gene Names	AChE
UniProt Entry Name	ACES_RABIT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/ache-rat-elisa-kits/acetylcholinesterase-yt-blood-group/79899>