Mouse Acetylcholinesterase(AChE)ELISA Kit

Product Code	CSB-E17521m
Abbreviation	AChE
Protein Biological Process 1	Neurobiology
Target Name	Acetylcholinesterase(AChE)
Uniprot No.	P21836
Alias	ARACHE, N-ACHE, YT, OTTHUMP00000211347|OTTHUMP00000211349|OTTHUMP00000211356|acetylcholinesterase|apoptosis-related acetylcholinesterase
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Protein Biological Process 3	Neurotransmitter degradation
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	0.312 mU/mL-20 mU/mL
Sensitivity	0.078 mU/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Neuroscience
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5°C. Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	Ache

Tag Info	quantitative
Protein Description	Sandwich
Component	A micro ELISA plate --- The 96-well plate has been pre-coated with an anti-mouse AChE antibody. This dismountable microplate can be divided into 12 x 8 strip plates. Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve. One vial Biotin-labeled AChE antibody (100 x concentrate) (120 µl/bottle) ---Act as the detection antibody. One vial HRP-avidin (100 x concentrate) (120 µl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic. One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the Biotin-antibody. One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution. One vial Sample Diluent (50 ml/bottle)---Dilute the sample to an appropriate concentration. One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances. One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue. One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow. Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation. An instruction manual
Description	This Mouse AChE ELISA Kit was designed for the quantitative measurement of Mouse AChE protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.312 mU/mL-20 mU/mL and the sensitivity is 0.078 mU/mL.
Target Details	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.
Product Precision	Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of mouse AChE in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:100	Average %	90
	Range %	84-96
1:200	Average %	96
	Range %	91-104
1:400	Average %	95
	Range %	90-100
1:800	Average %	95
	Range %	88-102

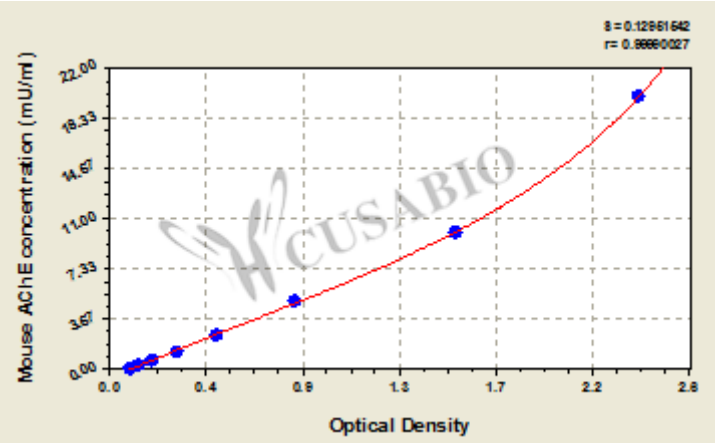
Recovery

The recovery of mouse AChE spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	94	89-101
EDTA plasma (n=4)	98	92-104

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



mU/ml	OD1	OD2	Average	Corrected
20	2.313	2.413	2.363	2.260
10	1.498	1.598	1.548	1.445
5	0.840	0.830	0.835	0.732
2.5	0.479	0.489	0.484	0.381
1.25	0.306	0.316	0.311	0.208
0.625	0.197	0.207	0.202	0.099
0.312	0.135	0.146	0.141	0.038
0	0.103	0.103	0.103	?

Msds	{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E17521m.pdf","filename":"MSDS"}}