Fish Acetylcholinesterase(AChE)ELISA Kit

Product Code	CSB-E17001Fh
Abbreviation	AChE
Protein Biological Process 1	Neurobiology
Target Name	Acetylcholinesterase(AChE)
Uniprot No.	P04058
Alias	ARACHE, N-ACHE, YT, OTTHUMP00000211347|OTTHUMP00000211349|OTTHUMP00000211356|acetylcholinesterase|apoptosis-related acetylcholinesterase
Product Type	ELISA Kit
Immunogen Species	Fish
Protein Biological Process 3	Neurotransmitter degradation
Sample Types	serum, plasma, tissue homogenates
Detection Range	2.5 ng/mL-40 ng/mL
Sensitivity	2.5 ng/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
Gene Names	ache
Tag Info	quantitative
Protein Description	Competitive
Description	This Fish AChE ELISA Kit was designed for the quantitative measurement of Fish AChE protein in serum, plasma, tissue homogenates. It is a Competitive ELISA kit, its detection range is 2.5 ng/mL-40 ng/mL and the sensitivity is 2.5 ng/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%<15%

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

Inter-assay Precision (Precision between assays): CV%<15%

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 fish 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)
1:1	Average %	94
	Range %	89-103
1:2	Average %	92
	Range %	87-101
1:4	Average %	93
	Range %	87-100
1:8	Average %	89
	Range %	83-99

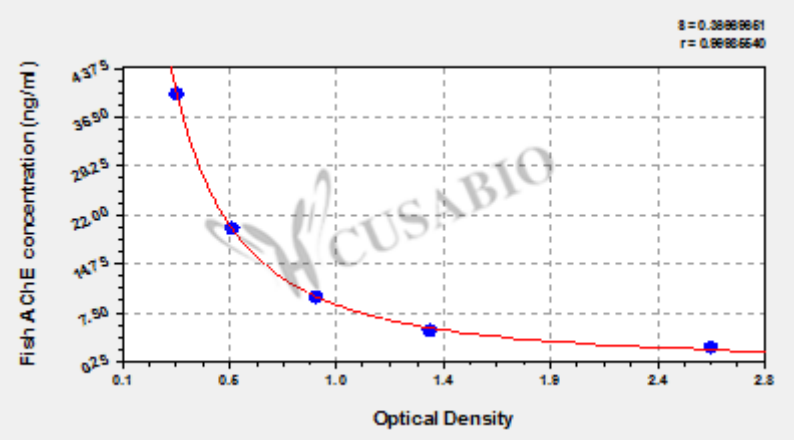
Recovery

The recovery of fish 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)	89	84-93
EDTA plasma (n=4)	94	87-100

Typical

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



ng/ml	OD1	OD2	Average	?
40	0.284	0.292	0.288	?
20	0.521	0.532	0.527	?
10	0.886	0.891	0.889	?
5	1.374	1.382	1.378	?
2.5	2.583	2.599	2.591	?