

Rat Choline Acetyltransferase (ChAT) ELISA Kit | ChAT elisa kit

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CATALOG #
AAA137587

REACTIVITY
Rat

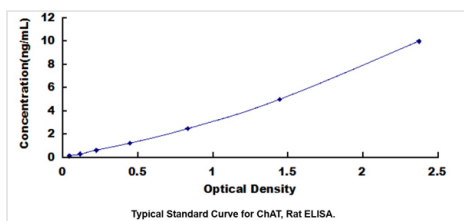
PRODUCT SYNONYMS

Choline Acetyltransferase (ChAT); Rat Choline Acetyltransferase (ChAT) ELISA Kit; CMS1A; CMS1A2; CHOACTase; Choline acetylase; ChAT elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of ChAT. No significant cross-reactivity or interference between ChAT and analogues was observed.
Sequence Length	95
Assay Type	Quantitative Sandwich
Samples	Rat tissue homogenates, cell lysates and other biological fluids
Detection Range	0.156-10ng/mL
Sensitivity	< 0.062ng/mL
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high-level ChAT were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high-level ChAT were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Preparation and Storage	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for ChAT elisa kit	Principle of the Assay: The microplate provided in this kit has been pre-coated with an antibody specific to ChAT. Standards or samples are then added to the appropriate microplate wells with a biotin-conjugated antibody specific to ChAT. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain ChAT, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of ChAT in the samples is then determined by comparing the O.D. of the samples to the standard curve. Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of ChAT in rat tissue homogenates, cell lysates and other biological fluids.
Product Categories/Family for ChAT elisa kit	Enzyme & Kinase; Metabolic pathway; Cardiovascular biology; Neuroscience
References	Cadmium-induced neurotoxic effects on rat basal forebrain cholinergic system through thyroid hormones disruption; Environ Toxicol Pharmacol; 2022 Feb;90:103791.; PMID: 34968718; Emma Sola; Department of Legal Medicine, Psychiatry and Pathology, Medicine School, Complutense University of Madrid, 2804Madrid, Spain.

NCBI AND UNIPROT INFORMATION

NCBI GI #	553229
NCBI GeneID	1103
UniProt Accession #	P28329; Q16488; Q9BQ23; Q9BQ35; Q9BQE1; A2BDF4; A2BDF5
Molecular Weight	70,394 Da
NCBI Official Full Name	choline acetyltransferase, partial
NCBI Official Synonym Full Names	choline O-acetyltransferase
NCBI Official Symbol	CHAT
NCBI Official Synonym Symbols	CMS6; CMS1A; CMS1A2; CHOACTASE
NCBI Protein Information	choline O-acetyltransferase
UniProt Protein Name	Choline O-acetyltransferase
UniProt Gene Name	CHAT
UniProt Synonym Gene Names	CHOACTase; ChAT; Choline acetylase
UniProt Entry Name	CLAT_HUMAN

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.