

## Basic Information

<b>Product Name</b>	Anti-CHAT Antibody	
<b>Gene Name</b>	CHAT	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	mouse, rat	
<b>Tested Application</b>	WB, IHC, ELISA	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived rat Choline Acetyltransferase/Chat recombinant protein (Position: E19-D612).	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	71 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	ELISA:	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

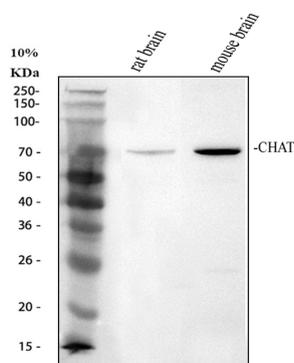
Choline acetyltransferase (commonly abbreviated as<sup>°</sup>ChAT,but sometimes<sup>°</sup>CAT) is a transferase enzyme responsible for the synthesis of the neurotransmitter acetylcholine. In humans,the choline acetyltransferase enzyme is encoded by the<sup>°</sup>CHAT gene. This gene product is a characteristic feature of cholinergic neurons,and changes in these neurons may explain some of the symptoms of Alzheimer's disease. Polymorphisms in this gene have been associated with Alzheimer's disease and mild cognitive impairment. Mutations in this gene are associated with congenital myasthenic syndrome associated with episodic apnea. Multiple transcript variants encoding different isoforms have been found for

this gene, and some of these variants have been shown to encode more than one isoform.

## Reference

Anti-CHAT Antibody 被引用在12文献中。

## Selected Validation Data



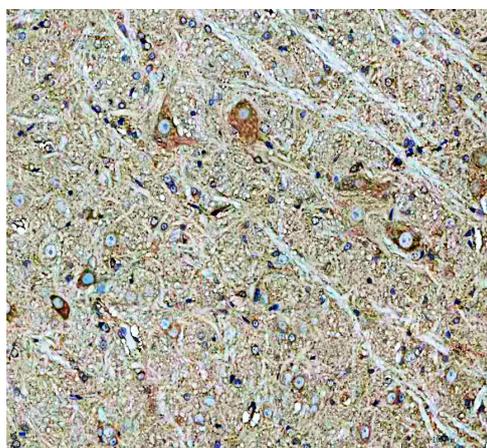
Western blot analysis of CHAT using anti-CHAT antibody (A01192-5). The sample well of each lane was loaded with 30  $\mu$ g of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-CHAT antigen A03957-Aen affinity purified polyclonal antibody (A01192-5) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CHAT at approximately 71 kDa. The expected band size for CHAT is at 83 kDa.



IHC analysis of CHAT using anti-CHAT antibody (A01192-5).

CHAT was detected in a paraffin-embedded section of rat spinal cord tissue. The tissue section was incubated with rabbit anti-CHAT Antibody (A01192-5) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.