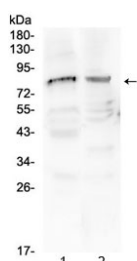


## Choline acetyltransferase Antibody (R32706)

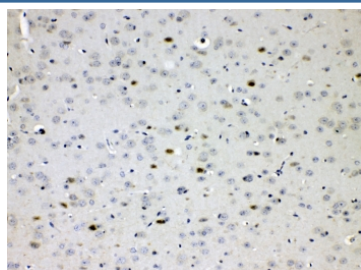
Catalog No.	Formulation	Size
R32706	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

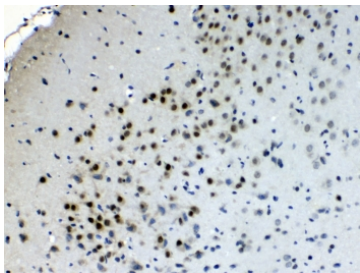
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Mouse, Rat
<b>Predicted Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity
<b>Buffer</b>	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
<b>UniProt</b>	P28329
<b>Localization</b>	Cytoplasmic, nuclear
<b>Applications</b>	Western Blot : 0.5-1ug/ml IHC (FFPE) : 1-2ug/ml
<b>Limitations</b>	This Choline acetyltransferase antibody is available for research use only.



Western blot testing of 1) rat testis and 2) mouse testis tissue with Choline acetyltransferase antibody at 0.5ug/ml. Predicted molecular weight ~83/74/70 kDa (isoforms M/S/R), observed here at ~84 kDa.



IHC testing of FFPE mouse brain tissue with Choline acetyltransferase antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE rat brain tissue with Choline acetyltransferase antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.

## Description

Choline acetyltransferase (also called ChAT or CAT) is a transferase enzyme responsible for the synthesis of the neurotransmitter acetylcholine. In humans, the choline acetyltransferase enzyme is encoded by the 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.

## Application Notes

Optimal dilution of the Choline acetyltransferase antibody should be determined by the researcher.

## Immunogen

Amino acids D446-R652 from the human protein were used as the immunogen for the Choline acetyltransferase antibody.

## Storage

After reconstitution, the Choline acetyltransferase antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.