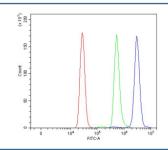


# **Choline Acetyltransferase Antibody / ChAT (RQ7061)**

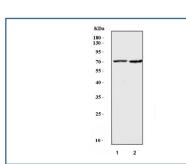
Catalog No.	Formulation	Size
RQ7061	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

# **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P28329
Applications	Western Blot : 0.5-1 ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Choline Acetyltransferase antibody is available for research use only.



Flow cytometry testing of human U937 cells with Choline Acetyltransferase antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=Choline Acetyltransferase antibody.



Western blot testing of 1) rat brain and 2) mouse brain tissue lysate with Choline Acetyltransferase antibody. Predicted molecular weight ~83/74/70 kDa (isoforms M/S/R).

## **Description**

Choline acetyltransferase (commonly abbreviated as ChAT, but sometimes 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**

Recombinant human protein (amino acids L131-S704) was 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.