

**Choline Acetyltransferase Antibody**  
Affinity purified goat polyclonal antibody  
Catalog # AN1171**Specification**

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**Choline Acetyltransferase Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P28329</a>
Reactivity	Chicken, Human, Mouse, Pig
Host	Goat
Clonality	polyclonal
Calculated MW	70 KDa

**Choline Acetyltransferase Antibody - Additional Information**

Gene ID	1103
Gene Name	CHAT

**Target/Specificity**

Native choline acetyltransferase purified from human placenta.

**Dilution**

WB~~ 1:100

**Format**

Prepared from goat serum by affinity purification using a column to which the protein immunogen was coupled.

**Antibody Specificity**

Specific for the ~ 70k choline acetyltransferase protein.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Choline Acetyltransferase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

Blue Ice

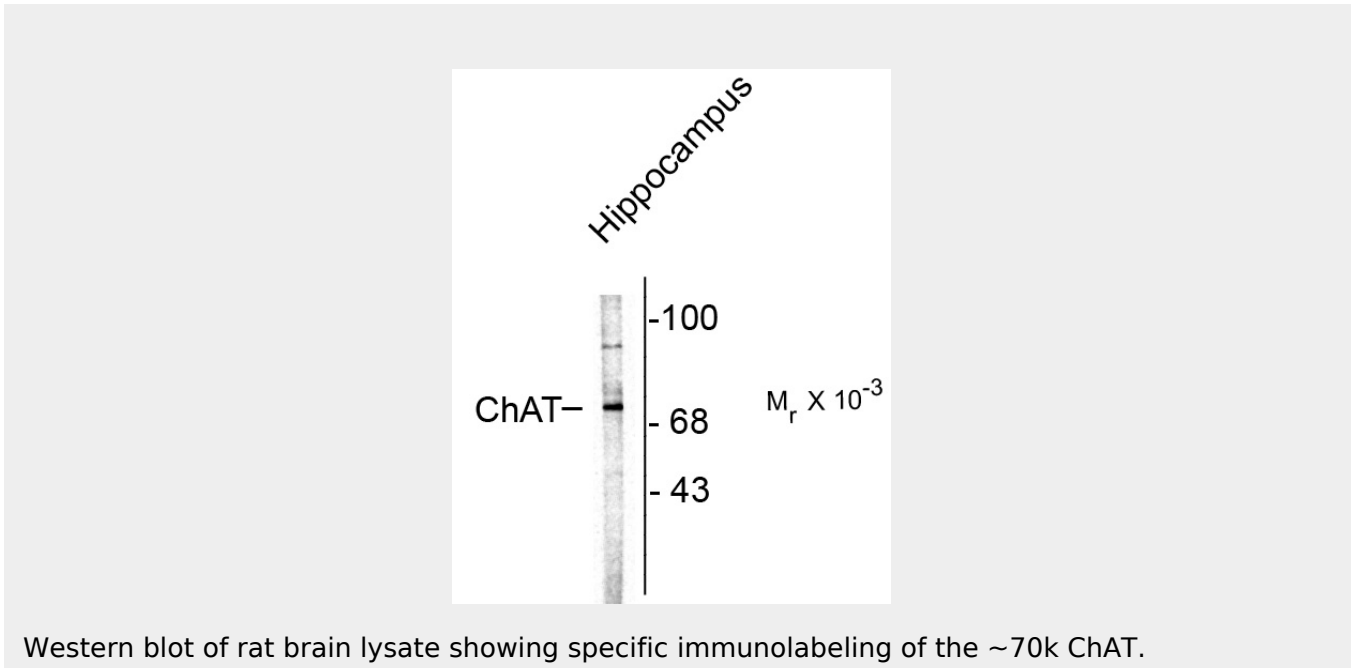
**Choline Acetyltransferase Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Choline Acetyltransferase Antibody - Images



Western blot of rat brain lysate showing specific immunolabeling of the ~70k ChAT.

### Choline Acetyltransferase Antibody - Background

Choline acetyltransferase is a neuronal enzyme which catalyzes the reaction between Acetyl CoA and choline resulting in the formation of acetylcholine. It is therefore found primarily in cholinergic neurons making it a valuable marker for diseases associated with decreased cholinergic function such as Schizophrenia, Alzheimer disease (AD) and Down syndrome (Holt et al. 1999). Decreased choline acetyltransferase activity in particular has been shown in Schizophrenic subjects (Karson et al 1993). It has furthermore been demonstrated that in patients with AD, there are significantly lower levels of cortical ChAT that correlate with severity of the disease as measured by loss of neuropsychological function (Baskin et al. 1999).

### Choline Acetyltransferase Antibody - References

- Karson CN, Casanova MF, Kleinman JE, Griffin WS (1993) Choline acetyltransferase in schizophrenia. *Am. J. Psychiatry* 150:454-459.
- Holt DJ, Herman MM, Hyde TM, Kleinman JE, Cinton CM, German DC, Hersh LB, Greybiel AM, Saper CB (1999) Evidence for a deficit in cholinergic interneurons in the striatum in schizophrenia. *Neuroscience* 94(1):21-31.
- Baskin DS, Browning JL, Pirozzolo FJ, Korporaal S, Baskin JA, Appel SH (1999) Brain choline acetyltransferase and mental function in Alzheimer disease. *Arch Neurol.* 56:1121-1123.