



## RayBiotech, Inc.

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### Certificate of Analysis and Data Sheet

## Mouse Anti-Rat Choline Acetyltransferase

### With HRP-conjugated Secondary Antibody

**Catalog No.**  
DS-MB-01001

**Target Species**  
Rat

**Isotype**  
IgG1

### Preparation

**Immunogen:** Choline acetyltransferase purified from rat brain

### Specificity

This antibody is specific for choline acetyltransferase and stains cholinergic neurons in the brain and central nervous system.

Choline acetyltransferase is an enzyme, present the presynaptic ends of axons, that catalyzes the transfer of the acetyl group of acetyl CoA to choline, forming the neurotransmitter acetylcholine.

Reacts with: Chicken

N.B. Antibody reactivity and working conditions may vary between species.

### Formulation

**Product Type:** Monoclonal Antibody

**Product Form:** Ascitic Fluid

**Preservative & Stabilizers:** None present.

### Storage

Store at -20°C only.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody.

**Shelf Life:** 18 months from date of dispatch.

### Applications

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	•			

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.**  
**Not for diagnostic or therapeutic use.**



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### Secondary Antibody Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	•			1:5000-1:10000

### References

1. Hagg, T. *et al.* (1988) Delayed treatment with nerve growth factor reverses the apparent loss of cholinergic neurons after acute brain damage *Exp Neurol.* 101: 303 - 312
2. Dietz, G. W., Jr. & Salvaterra, P. M. (1980) Purification and peptide mapping of rat brain choline acetyltransferase *J. Biol. Chem.* 255: 10612 - 10617.
3. Crawford, G. D., *et al.* (1982) Interaction of monoclonal antibodies with mammalian choline acetyltransferase. *Proc Natl Acad Sci U S A.* 79: 7031 - 7035.
4. Matthews, D. A. *et al.* (1987) An immunocytochemical study of choline acetyltransferase-containing neurons and axon terminals in normal and partially deafferented hippocampal formation *Brain Res.* 402: 30 - 43
5. Hagg, T. *et al.* (1989) Nerve growth factor (NGF) reverses axotomy-induced decreases in choline acetyltransferase, NGF receptor and size of medial septum cholinergic neurons *Brain Res.* 505: 29 - 38.
6. Lindh, B., *et al.* (1986) Immunohistochemical demonstration of choline acetyltransferase-immunoreactive preganglionic nerve fibers in guinea pig autonomic ganglia. *Proc Natl Acad Sci U S A.* 83: 5316 - 5320.
7. Hagg, T. *et al.* (1992) Ciliary neurotrophic factor prevents neuronal degeneration and promotes low affinity NGF receptor expression in the adult rat CNS *Neuron* 8: 145-158.

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