# Datasheet: 2080-0101

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| **Description:** | MOUSE ANTI RAT CHOLINE ACETYLTRANSFERASE |
| **Specificity:** | CHOLINE ACETYLTRANSFERASE |
| **Other names:** | ChAT |
| **Format:** | Ascites |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | 1E6 |
| **Isotype:** | IgG1 |
| **Quantity:** | 0.1 ml |

## Product Details

**Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

| | Yes | No | Not Determined | Suggested Dilution |
|---|---|---|---|---|
| Immunohistology - Frozen | ▪ | | | 1/100 - 1/250 |

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

**Target Species**

Rat

**Species Cross Reactivity**

Reacts with: Chicken
**N.B.** Antibody reactivity and working conditions may vary between species.

**Product Form**

Ascitic Fluid

**Preservative Stabilisers**

None present.

**Immunogen**

Choline acetyltransferase purified from rat brain.

**External Database Links**

**UniProt:**
P32738 Related reagents

**Entrez Gene:**
290567 Chat Related reagents

**Specificity**

**Mouse anti Rat choline acetyltransferase antibody, clone 1E6** recognizes 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

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| | transfer of the acetyl group of acetyl CoA to choline, forming the neurotransmitter acetylcholine. |
| **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<br>2. Dietz, G. W., Jr. & Salvaterra, P. M. (1980) Purification and peptide mapping of rat brain choline acetyltransferase J. Biol. Chem. 255: 10612 - 10617.<br>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.<br>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<br>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.<br>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.<br>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. |
| **Storage** | Store at -20$^{o}$C only.<br>Storage in frost-free freezers is not recommended.<br>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. |
| **Shelf Life** | 18 months from date of despatch. |
| **Health And Safety Information** | Material Safety Datasheet documentation available at:<br>Material Safety Datasheet Documentation #10194 available at:<br>https://www.bio-rad-antibodies.com/uploads/MSDS/10194.pdf |
| **Regulatory** | For research purposes only |

# Related Products

## Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA1209)


**North & South America** Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

**Worldwide** Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

**Europe** Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com


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**Printed on 13 Apr 2018**