

# Mouse Anti-Drosophila ChaT Monoclonal Antibody

## Mouse, Monoclonal (ChaT)

Cat. No. DMAB9158MD

Lot. No. (See product label)

### PRODUCT INFORMATION

**Product Overview:** Mouse monoclonal antibody to drosophila choline acetyltransferase.

**Antigen Description:** Choline acetyltransferase (abbreviated "ChAT") is an enzyme that is synthesized within the body of a neuron. It is then transferred to the nerve terminal via axoplasmic flow. The role of choline acetyltransferase is to join Acetyl-CoA to choline, resulting in the formation of the neurotransmitter acetylcholine. In humans, the choline acetyltransferase enzyme is encoded by the CHAT gene.

**Immunogen:** Drosophila choline acetyltransferase fusion protein.

**Host Animal:** Mouse

**Isotype:** IgG1

**Applications:** Immunoprecipitation; Immunoblotting; Immunohistochemistry

**Species Specificity:** Drosophila

**Adjuvant:** Freund's incomplete

### ANTIGEN GENE INFORMATION

**Gene Name:** [Cha Choline acetyltransferase \[ Drosophila melanogaster \]](#)

**Official Symbol:** Cha

**Synonyms:** Cha; Choline acetyltransferase; Cat; CG12345; cha; ChaT; ChAt; ChAT; CLAT\_DROME; CT23399; dChAT; Dmel\CG12345; I(3)91Cc

**GeneID:** [42249](#)

**mRNA Refseq:** [NM\\_057656](#)

**Protein Refseq:** [NP\\_477004](#)

**UniProt ID:** P07668

**Chromosome Location:** 91C1-91C5; 3-64.6 cM

**Pathway:** Acetylcholine Neurotransmitter Release Cycle; Biogenic Amine Synthesis; Glycerophospholipid metabolism; Neuronal System; Neurotransmitter Release Cycle; Transmission across Chemical Synapses

**Function:** choline O-acetyltransferase activity

### REFERENCES

1. Midline signalling systems direct the formation of a neural map by dendritic targeting in the Drosophila motor system. Mauss A, et al. PLoS Biol, 2009 Sep.
2. Peptidergic clock neurons in Drosophila: ion transport peptide and short neuropeptide F in subsets of dorsal and ventral lateral neurons. Johard HA, et al. J Comp Neurol, 2009 Sep 1.
3. Feminizing cholinergic neurons in a male Drosophila nervous system enhances aggression. Mundiyanapurath S, et al. Fly (Austin), 2009 Jul-Sep.

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