NEUROMICS

ChAT   Data Sheet

Catalog Number:	MO20019	**Host:**	Mouse
Ig Class:	IgG, kappa; clone: 38B12	**Species Reactivity:**	Human
Immunogen Sequence:	Prokaryotic recombinant protein corresponding to the C-terminal region of the human ChAT molecule.	**Format:**	Liquid- tissue culture supernatant containing 15mM sodium azide.

Applications: Immunohistochemistry-**1:25-**1:50 (Paraffin-embedded only).

Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.

Storage: Antibody can be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. *Avoid repeated freeze-thaw cycles.*

References: Anke Tappe and Rohini Kuner. Regulation of motor performance and striatal function by synaptic scaffolding proteins of the Homer1 family. PNAS January 17, 2006 vol. 103 no. 3 774-779.

Application Notes

High temperature antigen unmasking technique using 1mM EDTA (pH8.0).

60 minutes primary antibody incubation at 25°C.
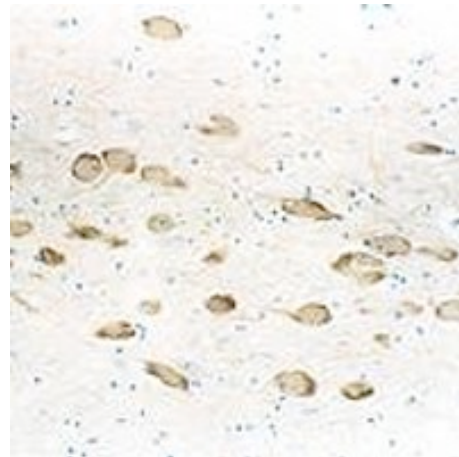Standard ABC technique.

Note: Enhancement using nickel DAB may be helpful in visualing staining.

Western Blotting: Not recommended.

Description/Data:
Murine choline-O-acetyltransferase (EC 2.3.1.6) is a 71,721 dalton protein(640 amino acids) expressed in cholinergic neurons of both the PNS and CNS. In the CNS, ChAT is expressed in motor neurons and pre-ganglionic autonomic neurons of the spinal cord, a subset of neurons in the neostriatum, and in the basal forebrain. In the PNS, ChAT is expressed in a small subpopulation of sympathetic neurons and in all parasympathetic neurons. ChAT is the enzyme responsible for synthesis of acetylcholine from acetyl-coenzyme A and choline.

Image: ChAT staining of Human brain, basal ganglia. Note cytoplasmic staining of neurons of the nucleus basalis of Meynert. Paraffin section.

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