

Product Datasheet

Chickens make better antibodies.

Anti-Choline Acetyltransferase (ChAT) Antibody

Overview

Catalog # CAT

 $\textbf{Concentration} \hspace{1.5cm} 100 \ \mu\text{g/mL}$

Host Species Chicken Polyclonal
Format Affinity-Purified IgY

Buffer Phosphate-buffered (10 mM) isotonic (0.9%, w/v) saline ("PBS," pH 7.2) with sodium azide (0.02%,

w/v) added as a preservative.

Applications IHC 1:1000-1:2000 ICC 1:1000-1:2000

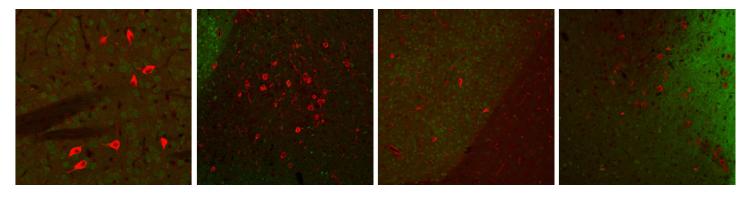
Species Reactivity Human, Mouse, and Rat

Immunogen Synthetic peptide

Molecular Weight 72 kDa

Cite this Antibody Aves Labs Cat# CAT, RRID: AB_2313537

Images



ChAT-immunoreactivity (RED) in cholinergic neurons within the mouse caudate nucleus in a paraformaldehyde-fixed (4%) paraffin-embedded section of a transgenic adult male C57Black6 mouse. The green staining is low-level GFP immunoreactivity in this transgenic animal. Dr. Felix Eckenstein, University of Vermont

Details

Target Description

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 acetylcoenzyme A and choline.

Purification Method

Chickens were immunized with a synthetic peptide / keyhole limpet hemocyanin (KLH) conjugate. The peptide corresponded to a region of the Choline Acetyltransferase gene product shared between the human (P28329, NCBI) and mouse (Q03059, NCBI) sequences. After repeated injections, immune eggs were collected, the IgY fractions were purified from the yolks, and then affinity purified using a peptide column. The concentrations of the eluates were then adjusted to 100 μ g/mL, and the preparation was filter-sterilized.

Quality Control Tests

Quality assurance analysis was performed using immunohistochemistry (at a dilution of 1:2000) using fluorescein-labeled goat anti-chicken IgY (1:500 dilution, Aves Labs Cat.# F-1005) as the secondary reagent.

Storage

Store at 4°C in the dark. Under these conditions, the antibodies should have a shelf life of at least twelve months, provided they remain sterile. For longer term storage, aliquot and freeze to avoid freeze-thaw of the antibody.

Our Guarantee

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience how chickens make better antibodies.

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