

Datasheet for ABIN7600920

anti-Choline Acetyltransferase antibody (AA 25-731)[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Choline Acetyltransferase (CHAT)
Binding Specificity:	AA 25-731
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Choline Acetyltransferase antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Immunocytochemistry (ICC), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-Choline Acetyltransferase/CHAT Antibody Picoband®
Immunogen:	E.coli-derived human Choline Acetyltransferase/CHAT recombinant protein (Position: T25-K731).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Choline Acetyltransferase/CHAT Antibody Picoband® (ABIN7600920). Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: Choline Acetyltransferase (CHAT)

Alternative Name: CHAT ([CHAT Products](#))

Background: Synonyms: Choline O-acetyltransferase (EC:2.3.1.6); CHOACTase; ChAT; Choline acetylase; CHAT

Background: Choline acetyltransferase (commonly abbreviated as ChAT, but sometimes CAT) is a transferase enzyme responsible for the synthesis of the neurotransmitter acetylcholine. In humans, the choline acetyltransferase enzyme is encoded by the CHAT gene. This gene product is a characteristic feature of cholinergic neurons, and changes in these neurons may explain some of the symptoms of Alzheimer's disease. Polymorphisms in this gene have been associated with Alzheimer's disease and mild cognitive impairment. Mutations in this gene are associated with congenital myasthenic syndrome associated with episodic apnea. Multiple transcript variants encoding different isoforms have been found for this gene, and some of these variants have been shown to encode more than one isoform.

Molecular Weight: 83 kDa

Gene ID: 1103

UniProt: [P28329](#)

Pathways: [Skeletal Muscle Fiber Development](#)

Application Details

Application Notes: Western blot, 0.25-0.5 µg/mL, Human

Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Human

Immunocytochemistry/Immunofluorescence, 2 µg/mL, Human

Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells, Human

ELISA, 0.1-0.5 µg/mL, -

1. Cohen-Haguenauer, O., Brice, A., Berrard, S., Van Cong, N., Mallet, J., Frezal, J. Localization of the choline acetyltransferase (CHAT) gene to human chromosome 10. Genomics 6: 374-378, 1990. 2. Harold, D., Peirce, T., Moskva, V., Myers, A., Jones, S., Hollingworth, P., Moore, P., Lovestone, S., Powell, J., Foy, C., Archer, N., Walter, S., and 11 others. Sequence variation in the CHAT locus shows no association with late-onset Alzheimer's disease. Hum. Genet. 113: 258-267, 2003. 3. Kraner, S, Laufenberg, I., Strassburg, H. M., Sieb, J. P., Steinlein, O. K. Congenital

Application Details

myasthenic syndrome with episodic apnea in patients homozygous for a CHAT missense mutation. Arch. Neurol. 60: 761-763, 2003.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.