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Anti-CHAT Picoband Antibody
Catalog # ABO10161

Specification

Anti-CHAT Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P28329
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Choline O-acetyltransferase(CHAT) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CHAT Picoband Antibody - Additional Information

Gene ID 1103

Other Names
Choline O-acetyltransferase, CHOACTase, ChAT, Choline acetylase, 2.3.1.6, CHAT

Calculated MW
82536 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat

Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Protein Name
Choline O-acetyltransferase

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human CHAT recombinant protein (Position: D446-R652). Human CHAT shares 88.4% and 87% amino acid (aa) sequence identity with mouse and rat CHAT, respectively.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution,**

at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Anti-CHAT Picoband Antibody - Protein Information

Name CHAT

Function
Catalyzes the reversible synthesis of acetylcholine (ACh) from acetyl CoA and choline at cholinergic synapses.

Anti-CHAT Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CHAT Picoband Antibody - Images

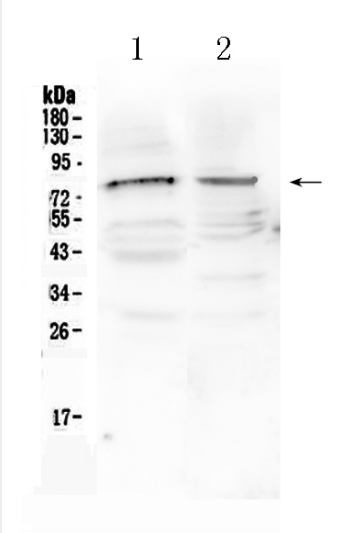

Figure 1. Western blot analysis of CHAT using anti- CHAT antibody (ABO10161). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat testis tissue lysates, Lane 2: mouse testis tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- CHAT antigen affinity purified polyclonal antibody (Catalog # ABO10161) at 0.5 Î¼g/mL overnight at

4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CHAT at approximately 83KD. The expected band size for CHAT is at 83KD.

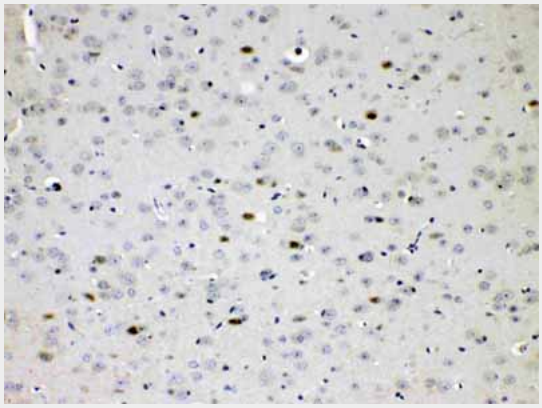

Figure 2. IHC analysis of CHAT using anti- CHAT antibody (ABO10161).CHAT was detected in paraffin-embedded section of mouse brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-CHAT Antibody (ABO10161) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

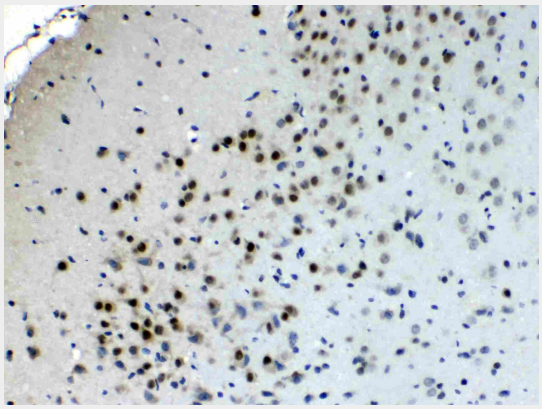

Figure 3. IHC analysis of CHAT using anti- CHAT antibody (ABO10161).CHAT was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- CHAT Antibody (ABO10161) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-CHAT Picoband Antibody - 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.