

Datasheet for ABIN6656077

anti-Choline Acetyltransferase antibody



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1 Image

1 Publication

Overview

Quantity:	100 µL
Target:	Choline Acetyltransferase (CHAT)
Reactivity:	Human
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This Choline Acetyltransferase antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	ChAT (Choline Acetyltransferase) Antibody
Immunogen:	Anti-ChAT Antibody was produced in rabbit by repeated immunizations with native choline acetyltransferase purified from human placenta.
Isotype:	IgG
Cross-Reactivity (Details):	Anti-ChAT antibody is directed against human ChAT protein.
Purification:	The antibody was affinity purified from monospecific antiserum by immunoaffinity purification.

Target Details

Target:	Choline Acetyltransferase (CHAT)
Alternative Name:	ChAT (Choline Acetyltransferase) (CHAT Products)
Background:	Synonyms: acetyl CoA:choline O-acetyltransferase, CHAT, CHOACTase, Choline acetylase,

Target Details

choline acetyltransferase, Choline O-acetyltransferase, CLAT, CMS1A, CMS1A2

Background: ChAT antibody recognizes choline acetyltransferase which is a neuronal enzyme which catalyzes the reaction between Acetyl CoA and choline resulting in the formation of acetylcholine. ChAT is found primarily in cholinergic neurons making it a valuable marker for diseases associated with decreased cholinergic function such as Schizophrenia, Alzheimer disease (AD) and Down syndrome. Decreased choline acetyltransferase activity in particular has been shown in Schizophrenic subjects. It has furthermore been demonstrated that in patients with AD, there are significantly lower levels of cortical ChAT that correlate with severity of the disease as measured by loss of neuropsychological function. Anti-ChAT antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.

Gene Name: CHAT

Gene ID: 1103

UniProt: [P28329](#)

Pathways: [Skeletal Muscle Fiber Development](#)

Application Details

Application Notes: Immunohistochemistry_Dilution: 1:100
Western_Blott_Dilution: 1:100

Comment: Anti-ChAT antibody is tested by western blot and immunohistochemistry and suitable for use in ELISA. Specific conditions for reactivity should be optimized by the end user. Expect a ~ 68/70 kDa band corresponding to choline acetyltransferase protein by Western Blot in the appropriate lysate or tissue.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Buffer: 0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer: 5 mg BSA
Preservative: 0.02 % (w/v) 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.

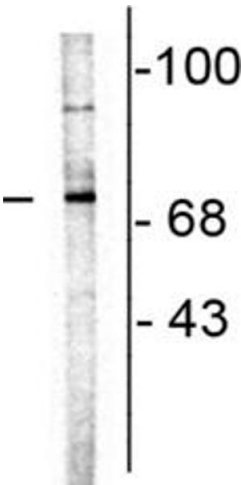
Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiry Date:	12 months

Publications

Product cited in:	Liu, Kim, Kim, Zhang, Bao, Denaxa, Lim, Kim, Liu, Wickersham, Pachnis, Hattar, Song, Brown, Blackshaw: "Lhx6-positive GABA-releasing neurons of the zona incerta promote sleep." in: Nature , Vol. 548, Issue 7669, pp. 582-587, (2017) (PubMed).
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Images



Western Blotting

Image 1. Western Blot of Anti-Choline Acetyltransferase Antibody Western Blot of Goat Anti-Choline Acetyltransferase Antibody. Lane 1: rat brain lysate. Lane 2: none. Load: 10 µg per lane. Primary antibody: ChAT antibody at 1:400 for overnight at 4°C. Secondary antibody: goat secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~70kDa/~70kDa for ChAT. Other band(s): none.