

Rabbit anti-Human, Mouse Choline Acetyltransferase Polyclonal Antibody | anti-CHAT antibody

Rabbit Anti-Human Choline Acetyltransferase Polyclonal

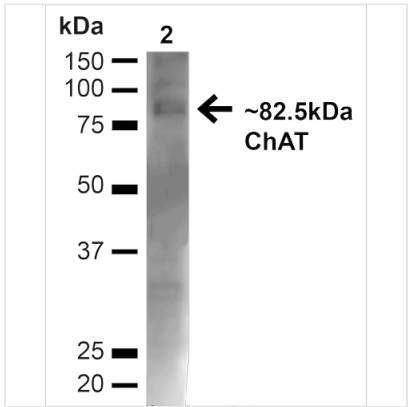
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103814	Rabbit	Human, Mouse	Western Blot

PRODUCT SYNONYMS

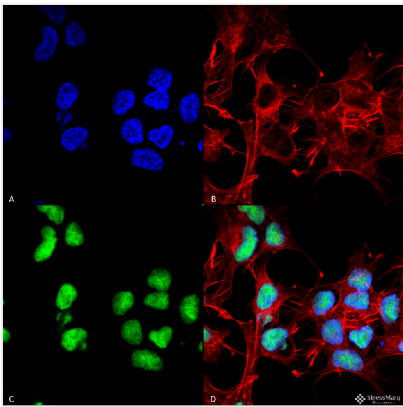
Choline Acetyltransferase; Polyclonal Antibody; Rabbit Anti-Human Choline Acetyltransferase Polyclonal; CHAT_Human Antibody; Acetyl CoA choline O Acetyltransferase Antibody; Choline Acetylase Antibody; CLAT_Human Antibody; CMS1A Antibody; Choline Acetyltransferase Antibody: ATTO 594; Choline Acetyltransferase Antibody; anti-CHAT antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Purity/Purification	Peptide Affinity Purified
Concentration	1 mg/ml (varies by lot)
Sequence Length	630
Applicable Applications for anti-CHAT antibody	WB (Western Blot)
Immunogen	Synthetic peptide from the N-terminal to the mid-protein of human Choline O-Acetyltrasferase
Immunogen Species	Human
COA	A 1:1000 dilution was sufficient for detection of Choline Acetyltransferase on mouse brain lysates using Goat anti-rabbit IgG:HRP as the secondary antibody.
Storage Buffer	PBS, 50% glycerol, 0.09% sodium azide
Conjugate	ATTO 594
Cellular Localization	Cytoplasm, Cytosol, Mitochondrion, Nucleus
Preparation and Storage	Store at -20 degree C



WB (Western Blot)
Western blot analysis of Mouse Brain showing detection of ~82.5kDa Choline Acetyltransferase protein using Rabbit Anti-Choline Acetyltransferase Polyclonal Antibody (SPC-706). Lane 1: MW Ladder. Lane 2: Mouse Brain (20 ug). Load: 20 ug. Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Rabbit Anti-Choline Acetyltransferase Polyclonal Antibody (SPC-706) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit: HRP at 1:2000 for 1 hour at RT. Color Development: TMB solution for 12 min at RT. Predicted/Observed Size: ~82.5kDa.



ICC (Immunocytochemistry)
Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-Choline Acetyltransferase Polyclonal Antibody (SPC-706). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-Choline Acetyltransferase Polyclonal Antibody (SPC-706) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Rabbit ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Choline Acetyltransferase Antibody (D) Composite.

ADDITIONAL INFORMATION

Related Product Information for anti-CHAT antibody	Acetylcholine (ACh) is a common neurotransmitter for motoneurons, preganglionic autonomic neurons, postganglionic parasympathetic neurons, a variety of brain regions and some emerging neuron-like stem cells. The metabolism of ACh is relatively simple, involving only two enzymes: choline acetyltransferase (ChAT) for synthesis and acetylcholinesterase (AChE) for degradation. Further, acetylcholine has little function in neurons other than neurotransmission and seems to be neuron specific. It seems that only cholinergic neurons have significant amounts of ChAT making anti-choline acetyltransferase a useful specific marker. ChAT is a valuable marker for diseases associated with decreased cholinergic function such as Schizophrenia, Alzheimer disease and Down syndrome (1-3).
Product Categories/Family for anti-CHAT antibody	Neuroscience; Neurotransmitter Receptors; Cell Signaling; Neurodegeneration; Alzheimer's Disease
References	1. Houser C.R., Crawford G.D., Barber R.P., Salvaterra P.M., Vaughn J.E. (1983) Brain Research. 266(1): 97-119. 2. Karson C.N., Casanova M.F., Kleinman J.E.m Griffin W.S. (1993) Am J Psychiatry. 150: 454-459. 3. Baskins D.S., et al. (1999) Arch Neurol. 56: 1121-1123.

NCBI AND UNIPROT INFORMATION

NCBI GI #	218931221
NCBI GeneID	1103
NCBI Accession #	NP_001136401.1
NCBI GenBank Nucleotide #	NM_001142929.1
UniProt Accession #	P28329; Q16488; Q9BQ23; Q9BQ35; Q9BQE1; A2BDF4; A2BDF5
Molecular Weight	Predicted molecular weight at ~82.5kDa. Observed molecular weights between 68-70kDa.
NCBI Official Full Name	choline O-acetyltransferase isoform 1
NCBI Official Synonym Full Names	choline O-acetyltransferase
NCBI Official Symbol	CHAT
NCBI Official Synonym Symbols	CMS6; CMS1A; CMS1A2; CHOACTASE

NCBI Protein Information	choline O-acetyltransferase
UniProt Protein Name	Choline O-acetyltransferase
UniProt Gene Name	CHAT
UniProt Synonym Gene Names	CHOACTase; ChAT; Choline acetylase
UniProt Entry Name	CLAT_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/choline-acetyltransferase-antibody-western-blot-elisa/103814>