

Rabbit Choline Acetyltransferase/CHAT Polyclonal Antibody | anti-CHAT antibody

Anti-Choline Acetyltransferase/CHAT Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126122	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

Choline Acetyltransferase/CHAT; Polyclonal Antibody; Anti-Choline Acetyltransferase/CHAT Antibody Picoband; anti-CHAT antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Natural and recombinant Human BST1
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-CHAT antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Samples	Cell culture supernatants, serum and plasma(heparin, EDTA)
Detection Range	156 pg/ml - 10,000 pg/ml
Sensitivity	<10 pg/ml
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of U937 cells using anti-Choline Acetyltransferase/CHAT antibody (AAA126122). Overlay histogram showing U937 cells stained with AAA126122 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Choline Acetyltransferase/CHAT Antibody (AAA126122, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of Choline Acetyltransferase/CHAT using anti-Choline Acetyltransferase/CHAT antibody (AAA126122). 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 30 ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-Choline Acetyltransferase/CHAT antigen affinity purified polyclonal antibody (#AAA126122) at 0.5 ug/mL overnight at 4 degree 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 1:5000 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 Choline Acetyltransferase/CHAT at approximately 71 kDa. The expected band size for Choline Acetyltransferase/CHAT is at 71 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CHAT antibody	Background: Bst1 (Bone marrow stromal cell antigen 1, ADP-ribosyl cyclase 2, CD157) is an enzyme that in humans is encoded by the BST1 gene. Bone marrow stromal cell antigen-1 is a stromal cell line-derived glycosylphosphatidylinositol-anchored molecule that facilitates pre-B-cell growth. The deduced amino acid sequence exhibits 33% similarity with CD38. BST1 expression is enhanced in bone marrow stromal cell lines derived from patients with rheumatoid arthritis. The polyclonal B-cell abnormalities in rheumatoid arthritis may be, at least in part, attributed to BST1 overexpression in the stromal cell population. Principle of the Assay: The Picokine™ Human BST1 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid-phase immunoassay specially designed to measure Human BST1 with a 96-well strip plate that is pre-coated with antibody specific for BST1. The detection antibody is a biotinylated antibody specific for BST1. The capture antibody is monoclonal antibody from mouse and the detection antibody is biotinylated polyclonal antibody from goat. The kit contains recombinant Human BST1 with immunogen: Expression system for standard: NS0; Immunogen sequence: G29-A293. The kit is analytically validated with ready-to-use reagents. To measure Human BST1, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product at 450nm is linearly proportional to Human BST1 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human BST1 in the sample.
Product Categories/Family for anti-CHAT antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	281185509
NCBI GeneID	1103
UniProt Accession #	P28329; Q16488; Q9BQ23; Q9BQ35; Q9BQE1; A2BDF4; A2BDF5
Molecular Weight	748
NCBI Official Full Name	Choline O-acetyltransferase
NCBI Official Synonym Full Names	choline O-acetyltransferase
NCBI Official Symbol	CHAT
NCBI Official Synonym Symbols	CMS1A; CMS1A2; CHOACTASE

NCBI Protein Information	choline O-acetyltransferase; choline acetylase; acetyl CoA: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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/choline-acetyltransferase-chat-antibody-flow-cytometry-western-blot-elisa/126122>