

Antibody to Choline Acetyltransferase (ChAT), affinity-purified RABBIT POLYCLONAL

Catalog Number: AB-N34AP **Quantity:** 50 micrograms

Format: PBS (0.14 M Sodium Chloride; 0.003 M Potassium Chloride; 0.002 M Potassium

Phosphate; 0.01 M Sodium Phosphate; pH 7.4) in 50% glycerol

Host: Rabbit

Immunogen: 22 amino acid peptide from porcine ChAT (GLF SSY RLP GHT QDT LVA QKSS)

coupled to KLH

Background: Choline acetyltransferase (ChAT) catalyzes the synthesis of the neurotransmitter acetylcholine (ACh) from choline and acetyl-CoA in cholinergic neurons. ChAT serves as a specific marker for cholinergic neurons in both peripheral and central nervous systems. Dysfunction of cholinergic neurons underlies aspects of clinical symptoms found in neurological and psychiatric disorders such as Alzheimer's disease, Down and Rett syndromes.

Specificity & Preparation: This antibody is generated at ATS using a 22 amino acid peptide from porcine ChAT (GLF SSY RLP GHT QDT LVA QKSS) as immunogen conjugated to KLH and injected in rabbits. The immunogen has 95% homology with human, rat and mouse ChAT sequences, and it has about 90% homology to the chicken sequence. The antibody is expected to cross-react with rat, mouse, human, rabbit, guinea pig and porcine ChAT protein. The antibody is routinely tested by western blot analysis.

Usage: This antibody has a high titer as shown by ELISA (average titer 1:5,000,000), diluted whole sera can be used for immunohistochemistry (ATS in-house; 1:2,000-4,000), immunocytochemistry, immunoblotting (ATS in-house; western 1:1,000-2,000), targeting (targeting agent in Anti-ChAT-SAP, Cat. #IT-42). Working dilutions must be determined by end user.

Storage: Store the antibody at -20°C for one year. Gently spin down material 5-10 seconds in a microfuge before use.

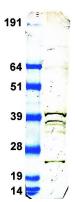


Selected References:

1. Benecke S, Ostermann-Latif C, Mader M, Schmidt B, Unger JW, Westarp ME, Felgenhauer K (1993) Antibodies raised against synthetic peptides react with choline acetyltransferase in various immunoassays and in immunohistochemistry. *J Neurochem* 61(3):804-811.

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To view protocol(s) for this and other products please visit: www.ATSbio.com/library/protocols



Lane 1: Crude rat brain whole cell extract probed with at 1:100 dilution

Lane 2: Molecular weight standards (Invitrogen SeeBlue)