## For Research Use Only

## CHAT Polyclonal antibody, PBS Only

Catalog Number: 24418-1-PBS



**Basic Information** 

Catalog Number:

GenBank Accession Number: BC130617

**Purification Method:** 

Antigen affinity purification

24418-1-PBS Source:

GeneID (NCBI): 1103

Rabbit

Immunogen Catalog Number:

**UNIPROT ID:** P28329

Isotype:

Full Name:

AG19550

choline acetyltransferase

Calculated MW: 748 aa, 83 kDa Observed MW:

60-66 kDa, 45 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF-P, IP, ELISA

Species Specificity: human, mouse, rat

## **Background Information**

CHAT (choline acetyltransferase) belongs to the carnitine/choline acetyltransferase family. It catalyzes the reversible synthesis of acetylcholine (ACh) from acetyl CoA and choline at cholinergic synapses. Defects in CHAT are the cause of congenital myasthenic syndrome with episodic apnea (CMSEA). CHAT is known to to be present exclusively in the cytoplasm of cholinergic neurons and anti-CHAT antibody has been considered as the best marker for cholinergic neurons. It has been observed that CHAT gene generates multiple mRNA splice variants, including peripheral type CHAT (pCHAT) and common type CHAT (cCHAT), encoding 40-55 kDa and 66-70 kDa forms of proteins, respectively.

Storage

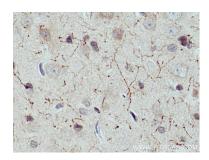
Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

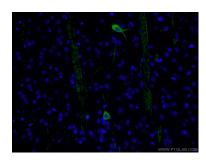
## **Selected Validation Data**



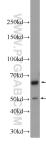
Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 24418-1-AP (CHAT antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 24418-1-PBS in a different storage buffer formulation.



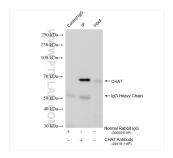
Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 24418-1-AP (CHAT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 24418-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 24418-1-AP (CHAT antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 24418-1-PBS in a different storage buffer formulation



rat brain tissue were subjected to SDS PAGE followed by western blot with 24418-1-AP (CHAT Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 24418-1-PBS in a different storage buffer formulation.



IP result of anti-CHAT (IP:24418-1-AP, 4ug; Detection:24418-1-AP 1:2000) with rat brain tissue lysate 1880 ug. This data was developed using the same antibody clone with 24418-1-PBS in a different storage buffer formulation.