

For Research Use Only

CHAT Polyclonal antibody

Catalog Number: 24418-1-AP

4 Publications



Basic Information

Catalog Number:

24418-1-AP

Size:

150ul, Concentration: 550 ug/ml by Nanodrop and 313 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG19550

GenBank Accession Number:

BC130617

GeneID (NCBI):

1103

UNIPROT ID:

P28329

Full Name:

choline acetyltransferase

Calculated MW:

748 aa, 83 kDa

Observed MW:

60-66 kDa, 45 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF-P 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF-P, IP, ELISA

Cited Applications:

IF

Species Specificity:

human, mouse, rat

Cited Species:

mouse

Positive Controls:

WB : rat brain tissue, human placenta tissue, mouse brain tissue

IP : rat brain tissue,

IHC : rat brain tissue, mouse brain tissue

IF-P : mouse brain tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

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 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Katarzyna Bilinska	33880469	bioRxiv	IF
Yongfu Lou	38703569	Int Immunopharmacol	IF
Yao Wei	37996529	Nat Neurosci	IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

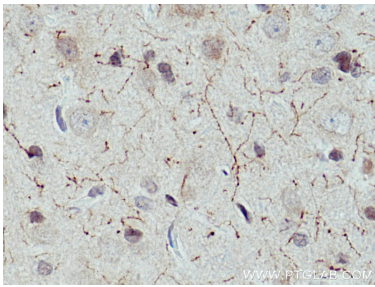
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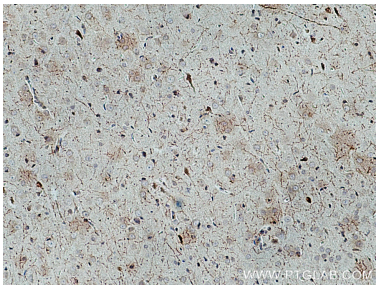
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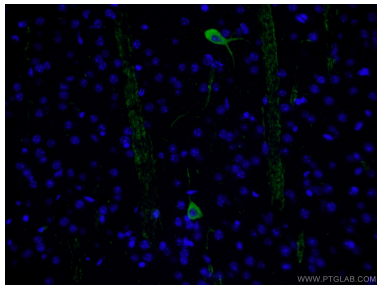
Selected Validation Data



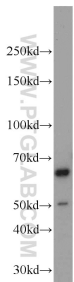
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 24418-1-AP (CHAT antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



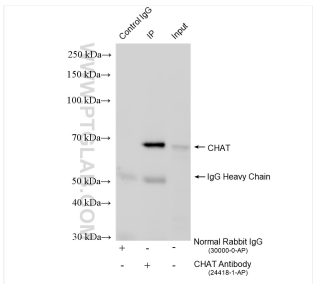
Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 24418-1-AP (CHAT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



rat brain tissue were subjected to SDS PAGE followed by western blot with 24418-1-AP (CHAT Antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



IP result of anti-CHAT (IP:24418-1-AP, 4ug; Detection:24418-1-AP 1:2000) with rat brain tissue lysate 1880 ug.