

For Research Use Only

# CHAT Monoclonal antibody

Catalog Number: 66816-1-Ig **1 Publications**



## Basic Information

<b>Catalog Number:</b> 66816-1-Ig	<b>GenBank Accession Number:</b> BC130617	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1400 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 1103	<b>CloneNo.:</b> 1F7A9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P28329	<b>Recommended Dilutions:</b> WB: 1:1000-1:4000 IHC: 1:500-1:2000
<b>Isotype:</b> IgG2b	<b>Full Name:</b> choline acetyltransferase	
<b>Immunogen Catalog Number:</b> AG19602	<b>Calculated MW:</b> 748 aa, 83 kDa	
	<b>Observed MW:</b> 67-71 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> IF	<b>WB :</b> Jurkat cells, PC-12 cells, HEK-293 cells, SH-SY5Y cells, Y79 cells, U-251 cells, Neuro-2a cells
<b>Species Specificity:</b> human, mouse, rat	<b>IHC :</b> mouse small intestine tissue, rat small intestine tissue
<b>Cited Species:</b> mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xuhui Ge	40328251	Neuron	IF

## Storage

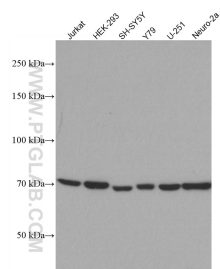
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

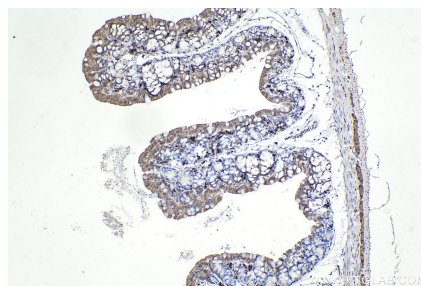
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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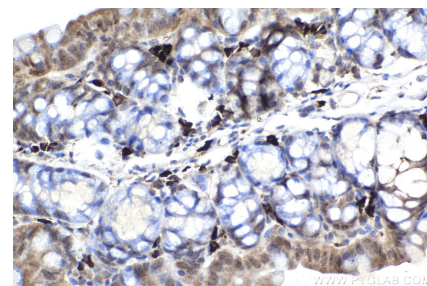
## Selected Validation Data



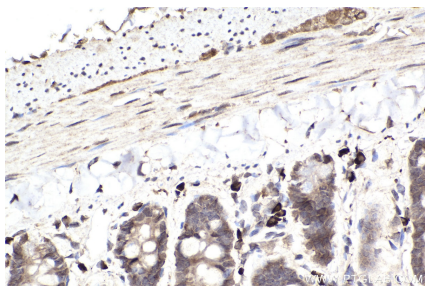
Various lysates were subjected to SDS PAGE followed by western blot with 66816-1-Ig (CHAT antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 66816-1-Ig (CHAT antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 66816-1-Ig (CHAT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat small intestine tissue slide using 66816-1-Ig (CHAT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).