### For Research Use Only

# CHAT Monoclonal antibody

Catalog Number:66816-1-Ig



**Basic Information** 

Catalog Number: GenBank Accession Number:

66816-1-lg BC130617 GeneID (NCBI): Size: 150ul, Concentration: 1400 ug/ml by 1103

Nanodrop and 1000 ug/ml by Bradford<sub>UNIPROT ID:</sub> method using BSA as the standard; P28329

Source: Full Name: Mouse choline acetyltransferase

Isotype: Calculated MW: IgG2b 748 aa, 83 kDa Immunogen Catalog Number: Observed MW: AG19602 67-71 kDa

**Purification Method:** Protein A purification

CloneNo.: 1F7A9

IHC 1:500-1:2000

Recommended Dilutions: WB 1:1000-1:4000

**Applications** 

**Tested Applications:** WB, IHC, ELISA Species Specificity:

human, mouse, rat

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

buffer pH 6.0

#### Positive Controls:

WB: Jurkat cells, PC-12 cells, HEK-293 cells, SH-SY5Y cells, Y79 cells, U-251 cells, Neuro-2a cells

IHC: mouse small intestine tissue, rat small intestine tissue

# **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.

## Storage

Storage:

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

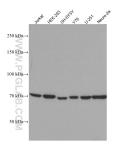
Storage Buffer:

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

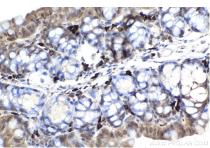
# **Selected Validation Data**



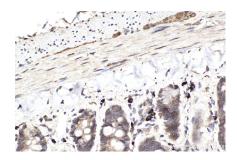
Various lysates were subjected to SDS PAGE followed by western blot with 66816-1-1g (CHAT antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



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



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



Immunohistochemical analysis of paraffinembedded 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).