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## ChAT Rabbit pAb

Catalog Number: bs-0042R

Target Protein: ChAT

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), Flow-Cyt (1ug/Test)

Reactivity: Human

Predicted MW: 82 kDa

Entrez Gene: 1103

Swiss Prot: P28329

Source: KLH conjugated synthetic peptide derived from human ChAT: 101-200/748.

Purification: affinity purified by Protein A

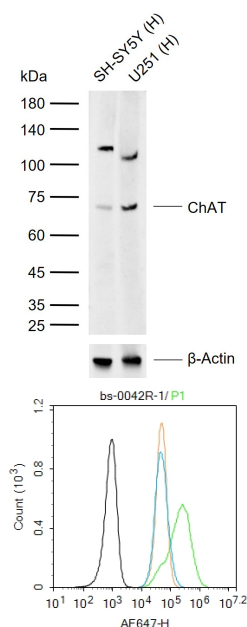
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** This gene encodes an enzyme which catalyzes the biosynthesis of the neurotransmitter acetylcholine. This gene product is a characteristic feature of cholinergic neurons, and changes in these neurons may explain some of the symptoms of Alzheimer's disease. Polymorphisms in this gene have been associated with Alzheimer's disease and mild cognitive impairment. Mutations in this gene are associated with congenital myasthenic syndrome associated with episodic apnea. Multiple transcript variants encoding different isoforms have been found for this gene, and some of these variants have been shown to encode more than one isoform. [provided by RefSeq, May 2010].

### VALIDATION IMAGES

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Sample: Lane 1: Human SH-SY5Y cell lysates Lane 2: Human U251 cell lysates Primary: Anti-ChAT (bs-0042R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 82 kDa Observed band size: 72 kDa

Blank control: SH-SY5Y. Primary Antibody (green line): Rabbit Anti-ChAT antibody (bs-0042R) Dilution:  $1\mu\text{g}/10^6$  cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647 Dilution:  $1\mu\text{g}/\text{test}$ . Protocol The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at  $-20^\circ\text{C}$ . The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=5.135] Wei Lu. et al. Effects of targeted muscle reinnervation on spinal cord motor neurons in rats following tibial nerve transection. Neural Regen Res. 2022 Jan;17(8):1827 IHC ; Rat . 35017445

[IF=3.53] Zhang Y, Zheng S, Geng Y, Xue J, Wang Z, et al. (2015) MicroRNA Profiling of Atrial Fibrillation in Canines: MiR-206 Modulates Intrinsic Cardiac Autonomic Nerve Remodeling by Regulating SOD1. PLoS ONE 10(3): e0122674. Other ; ="Dog" . 25816284

[IF=4.45] Wieck, Minna M., et al. "Human and murine tissue-engineered colon exhibit diverse neuronal subtypes and can be populated by enteric nervous system progenitor cells when donor colon is aganglionic." Tissue Engineering A (2015). IHC ; ="Human" . 26414777

[IF=3.58] Zhang, Xiuli, et al. "Catalpol improves cholinergic function and reduces inflammatory cytokines in the senescent mice induced by D-galactose." Food and chemical toxicology 58 (2013): 50-55. IHC ; ="Mouse" . 23612000

[IF=4.259] Wang,et al.Stimulation of Epicardial Sympathetic Nerves at Different Sites Induces Cardiac Electrical Instability to Various Degrees.(2018) Scientific Reports. 8:994. IHC ; Dog . 29343857