



## Rabbit Anti-Vesicular Acetylcholine Transporter antibody

SL1833R

<b>Product Name:</b>	Vesicular Acetylcholine Transporter
<b>Chinese Name:</b>	囊泡乙酰胆碱通道抗体
<b>Alias:</b>	Vesicular Acetylcholine Transporter; MGC12716; rVAT; SLC18A3; Solute carrier family 18 (vesicular acetylcholine) member 3; Solute carrier family 18 (vesicular monoamine) member 3; Solute carrier family 18 member 3; VACht; VACHt; VACHT HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	57kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human VAT:201-300/532
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Vesicular Acetylcholine Transporter (VACHt), (~70kD protein), belongs to the family of vesicular monoamine transporters(VMATs), which include VMAT1 and VMAT2

and the C.elegans putative ACh transporter unc-17. Members of this family function to concentrate neurotransmitters into synaptic vesicles through exchange of protons for neurotransmitters. VACHT is a functional transporter for the neurotransmitter acetylcholine(ACh). ACh is synthesized in the cytoplasm by choline acetyl transferase (ChAT) and transported by VACHT into synaptic vesicles where it is stored until released. After release from presynaptic nerve terminals ACh is hydrolyzed by extracellular ACh-esterases(AChE) to choline and acetate. VACHT mRNA is expressed in all known major cholinergic neurons in the central and peripheral nervous system. VACHT is abundantly expressed in the CNS and is mainly localized in small synaptic vesicles in cholinergic nerve terminals. VACHT provides a specific marker for cholinergic neurons for the study of cholinergic transmission in experimental models, in Alzheimer's disease and other nervous system disorders.

**Function:**

Involved in acetylcholine transport into synaptic vesicles.

**Subcellular Location:**

Membrane; Multi-pass membrane protein.

**Tissue Specificity:**

Peripheral and central cholinergic nervous systems.

**Similarity:**

Belongs to the major facilitator superfamily.  
Vesicular transporter family.

**SWISS:**

Q99536

**Gene ID:**

6572

**Database links:**

[Entrez Gene: 6572](#)Human

[Entrez Gene: 20508](#)Mouse

[Entrez Gene: 60422](#)Rat

[Omim: 600336](#)Human

[SwissProt: Q16572](#)Human

[SwissProt: O35304](#)Mouse

[SwissProt: Q62666](#)Rat

[Unigene: 654374](#)Human

[Unigene: 190503](#)Mouse

[Unigene: 9987](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

[www.sunlongbiotech.com](http://www.sunlongbiotech.com)