TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The vesicular acetylcholine transporter VACHT is an integral membrane protein with 12 putative trans-membrane domains. VACHT and choline acetyltransferase (ChAT) are encoded by genes organized in a single gene locus, and coregulation of the two genes has been reported several times. VACHT translocates acetylcholine from the cytoplasm into synaptic vesicles where it stays until release. After release from the presynaptic nerve terminal acetylcholine is hydrolyzed by acetylcholine esterase. During Alzheimer’s disease acetylcholine is one of the first neurotransmitters to be reduced.

Selected References SYSY Antibodies

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PloS one (2017) 12(7): e0181011. IHC, tested species: mouse
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Barron CM, Ji E, Sharma H, Yap P, Spencer NJ, Matusica D, Haberberger RV
Neurology and urodynamics (2017) : . IHC, tested species: mouse

Data Sheet

<table>
<thead>
<tr>
<th>Reconstitution/Storage</th>
<th>50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td>WB: 1 : 100 up to 1 : 1000 (AP staining) (see remarks)</td>
</tr>
<tr>
<td></td>
<td>IP: yes</td>
</tr>
<tr>
<td></td>
<td>ICC: 1 : 500 up to 1 : 10000</td>
</tr>
<tr>
<td></td>
<td>IHC: 1 : 100 up to 1 : 1000</td>
</tr>
<tr>
<td></td>
<td>IHC-P/FFPE: 1 : 500</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Recombinant protein corresponding to AA 475 to 530 from rat VACHT (UniProt Id: Q62666)</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Reacts with: human (Q16572), rat (Q62666), mouse (O35304), pig. Other species not tested yet.</td>
</tr>
<tr>
<td>Specificity</td>
<td>Specific for VACHT. (K.O. verified)</td>
</tr>
<tr>
<td>matching control</td>
<td>139-1P</td>
</tr>
<tr>
<td>Remarks</td>
<td>This antibody detects the glycosylated and unglycosylated protein and is an excellent marker for cholinergic axons. WB: VACHT aggregates after boiling, making it necessary to run SDS-PAGE only with non-boiled samples.</td>
</tr>
</tbody>
</table>

Cat.No. 139 103; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)