

## VACHT

Cat.No. 139-1P; control protein, 100 µg protein (lyophilized)

### Data Sheet

|                            |  |
|----------------------------|--|
| Reconstitution/<br>Storage | 100 µg protein, lyophilized. For reconstitution add 100 µl H <sub>2</sub> O to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use.  |
| Immunogen                  | Recombinant protein corresponding to AA 475 to 530 from rat VACHT (UniProt Id: Q62666)   |
| Recommended<br>dilution    | Optimal concentrations should be determined by the end-user.   |
| matching<br>antibodies     | 139 103, 139 105   |
| Remarks                    | This control protein consists of the Strep-Tag® fusion protein (aa 475 - 530) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of protein needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen. |

**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 General References

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