Specific for VAChT. Reacts with: rat (Q62666), mouse (O35304), human (Q16572). Recombinant protein corresponding to AA 475 to 530 from rat VAChT (UniProt Id: Q62666) 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**

Altered Dynex Axonal Assembly Factor 1 Expression in C-boutons in Bulbar and Spinal Cord Motor-Neurons in Sporadic Amyotrophic Lateral Sclerosis. 

Neuregulin-1 Erbb2 module in C-bouton synapses on somatic motor neurons: molecular compartmentation and response to peripheral nerve injury. 
Scientific reports (2017) 7: 40155. ICC

Neuregulin-1 is concentrated in the postsynaptic subsurface cistern of C-bouton inputs to α-motoneurons and altered during motoneuron diseases. 

Localization and dynamic changes of neuregulin-1 at C-type synaptic boutons in association with motor neuron injury and repair. 

**Selected General References**

Analysis of uptake and release of newly synthesized acetylcholine in PC12 cells overexpressing the rat vesicular acetylcholine transporter (VACHT). 
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