Synaptic Systems

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VGAT lumenal domain

Cat.No. 131 103C2; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen, fluorescence-labeled with Oyster® 488. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H_2O to get a 1mg/ml solution in PBS. Either add 1:1 (v/v) glycerol, then aliquot and store at -20°C until use, or store aliquots at -80°C without additives. Reconstitute immediately upon receipt! Avoid bright light when working with the antibody to minimize photo bleeching of the fluorescent dye.The mounting agent Aquatex®(Merck Chemicals) is not compatible with Oyster dyes!
Applications	**WB**: N/A **IP**: N/A **ICC**: 1 : 100 up to 1 : 200 **IHC**: yes **IHC-P/FFPE**: not tested yet
Label	Oyster 488
Immunogen	Synthetic peptide corresponding to AA 510 to 525 from rat VGAT (UniProt Id: O35458)
Reactivity	Reacts with: human (Q9H598), rat (O35458), mouse (O35633). Other species not tested yet.
Specificity	Specific for VGAT. (K.O. verified)
Remarks	This antibody is intended for labeling of recycling synaptic vesicles at inhibitory nerve terminals by adding to living neurons. Further details see Martens et al. 2008.

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

The **v**esicular **GA**BA **t**ransporter **VGAT** is responsible for uptake and storage of GABA and glycine by synaptic vesicles in the central nervous system. For this reason it is frequently referred to as the **v**esicular **i**nhibitory **a**mino**a**cid **t**ransporter **VIAAT**. It is different from the plasma membrane transporters in that it is driven by a proton electrochemical gradient across the vesicle membrane. So far, only one isoform is known. VGAT is currently the best marker for inhibitory nerve terminals.

Selected References SYSY Antibodies

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Selected General References

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McIntire SL, Reimer RJ, Schuske K, Edwards RH, Jorgensen EM
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Sagné C, El Mestikawy S, Isambert MF, Hamon M, Henry JP, Giros B, Gasnier B
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