

## VGAT cytoplasmic domain

Cat.No. 131 011BT; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

### Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized, biotin-labeled. . For reconstitution add 100 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	<b>WB:</b> 1 : 500 up to 1 : 2000 (AP staining) (see remarks) <b>IP:</b> yes <b>ICC:</b> 1 : 200 up to 1 : 1000 <b>IHC:</b> 1 : 100 up to 1 : 1000 <b>IHC-P/FFPE:</b> not tested yet
Label	biotin
Clone	117G4
Subtype	IgG3 (κ light chain)
Immunogen	Synthetic peptide corresponding to AA 75 to 87 from rat VGAT (UniProt Id: O35458)
Epitop	Epitop: AA 75 to 87 from rat VGAT (UniProt Id: O35458)
Reactivity	Reacts with: human (Q9H598), rat (O35458), mouse (O35633), Guinea pig, monkey. Other species not tested yet.
Specificity	Specific for mammalian VGAT. (K.O. verified)
matching control	131-0P
Remarks	<b>WB:</b> VGAT aggregates after boiling, making it necessary to run SDS-PAGE only with non-boiled samples.

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

The vesicular **GABA** transporter **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 vesicular inhibitory aminoacid transporter **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 General References

The vesicular GABA transporter, VGAT, localizes to synaptic vesicles in sets of glycinergic as well as GABAergic neurons. Chaudhry FA, Reimer RJ, Bellocchio EE, Danbolt NC, Osen KK, Edwards RH, Storm-Mathisen J. The Journal of neuroscience : the official journal of the Society for Neuroscience (1998) 18(23): 9733-50.

Identification and characterization of the vesicular GABA transporter.

McIntire SL, Reimer RJ, Schuske K, Edwards RH, Jorgensen EM. Nature (1997) 389(6653): 870-6.

Cloning of a functional vesicular GABA and glycine transporter by screening of genome databases.

Sagné C, El Mestikawy S, Isambert MF, Hamon M, Henry JP, Giros B, Gasnier B. FEBS letters (1997) 417(2): 177-83.

Uptake of GABA by rat brain synaptic vesicles isolated by a new procedure.

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