

VGAT cytoplasmic domain

Cat.No. 131-0P; control peptide, 100 µg peptide (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg peptide, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Control peptides should also be stored at -20°C when still lyophilized!
Immunogen	Synthetic peptide corresponding to AA 75 to 87 from rat VGAT (UniProt Id: O35458)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	131 002, 131 003, 131 011, 131 011BT, 131 011C2, 131 011C3, 131 008
Remarks	This control peptide consists of the synthetic peptide (AEPPVEGDIHYQR) 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 peptide 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 **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. Hell JW, Maycox PR, Stadler H, Jahn R. The EMBO journal (1988) 7(10): 3023-9.