

VGAT cytoplasmic domain

Cat.No. 131 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 up to 1 : 5000 (AP staining) (see remarks) IP: yes ICC: 1 : 100 up to 1 : 1000 IHC: 1 : 500 up to 1 : 3000 IHC-P/FFPE: yes
Immunogen	Synthetic peptide corresponding to AA 75 to 87 from rat VGAT (UniProt Id: O35458)
Reactivity	Reacts with: human (Q9H598), rat (O35458), mouse (O35633), monkey. Other species not tested yet.
Specificity	Specific for VGAT. K.O.
Matching control	131-0P
Remarks	WB: VGAT aggregates after boiling, making it necessary to run SDS-PAGE 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 amino acid 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 References SYSY Antibodies

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- Optogenetic Activation of Striatopallidal Neurons Reveals Altered HCN Gating in DYT1 Dystonia. Sciamanna G, Ponterio G, Vanni V, Laricchiuta D, Martella G, Bonsi P, Meringolo M, Tassone A, Mercuri NB, Pisani A. Cell reports (2020) 317: 107644. . **WB; tested species: mouse**
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- Enhancing WNT Signaling Restores Cortical Neuronal Spine Maturation and Synaptogenesis in Tbr1 Mutants. Fazel Darbandi S, Robinson Schwartz SE, Pai EL, Everitt A, Turner ML, Cheyette BNR, Willsey AJ, State MW, Sohail VS, Rubenstein JLR. Cell reports (2020) 312: 107495. . **IHC; tested species: mouse**
- M-current inhibition in hippocampal excitatory neurons triggers intrinsic and synaptic homeostatic responses at different temporal scales. Lezmy J, Gelman H, Katsenelson M, Styr B, Tikochinsky E, Lipinsky M, Peretz A, Slutsky I, Attali B. The Journal of neuroscience : the official journal of the Society for Neuroscience (2020) : . . **ICC; tested species: mouse**
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- High-Aspect-Ratio Semiconducting Polymer Pillars for 3D Cell Cultures. Tullii G, Giona F, Lodola F, Bonfadini S, Bossio C, Varo S, Desii A, Criante L, Sala C, Pasini M, Verpelli C, et al. ACS applied materials & interfaces (2019) : . . **ICC; tested species: rat**
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