10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Vesicular GABA Amino Acid Transporter (VGAT) Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1111

Specification

Vesicular GABA Amino Acid Transporter (VGAT) Antibody - Product Information

Application	**WB**
Primary Accession	O35458
Reactivity	**Rat**
Predicted	**Bovine, Monkey**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**53 KDa**

Vesicular GABA Amino Acid Transporter (VGAT) Antibody - Additional Information

Gene ID	**83612**
Gene Name	**SLC32A1**

Other Names
Vesicular inhibitory amino acid transporter, GABA and glycine transporter, Solute carrier family 32 member 1, Vesicular GABA transporter, rGVAT, Slc32a1, Vgat, Viaat

Target/Specificity
Synthetic peptide corresponding to amino acid residues from the N-terminal region conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification on a column made with the peptide used as antigen.

Antibody Specificity
Specific for the ~53k VGAT protein.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Vesicular GABA Amino Acid Transporter (VGAT) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

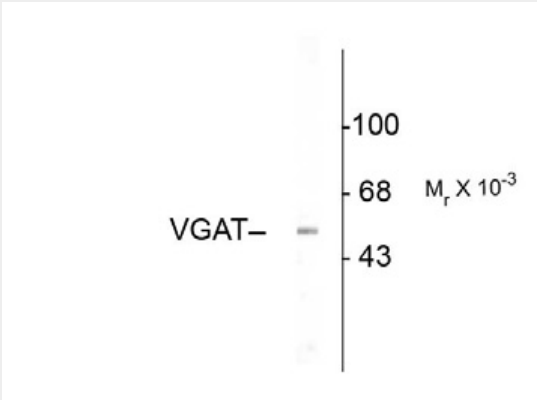
Vesicular GABA Amino Acid Transporter (VGAT) Antibody - Protocols

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Vesicular GABA Amino Acid Transporter (VGAT) Antibody - Images



Western blot of rat olfactory bulb lysate showing specific immunolabeling of the ~53k VGAT protein.

Vesicular GABA Amino Acid Transporter (VGAT) Antibody - Background

The Vesicular GABA Amino Acid Transporter (VGAT) is responsible for transport of the inhibitory neurotransmitter into synaptic vesicles(McIntire et al., 1997). The VGAT protein (also known as the Vesicular Inhibitory Amino Aid Transporter or VIAAT) is expressed in synaptic vesicles of both glycine and GABAergic synapses throughout the CNS (Chaudhry et al., 1998). Expression of the VGAT protein changes during development and also in response to patterns of neuronal activity (De et al., 2005).

Vesicular GABA Amino Acid Transporter (VGAT) Antibody - References

Chaudhry FA, Reimer RJ, Bellocchio EE, Danbolt NC, Osen KK, Edwards RH, Storm-Mathisen J (1998) The vesicular GABA transporter, VGAT, localizes to synaptic vesicles in sets of glycinergic as well as GABAergic neurons. J Neurosci 18:9733-9750.
De GS, Schafer MK, Defamie N, Chen C, Ricci A, Weihe E, Varoqui H, Erickson JD (2005) Homeostatic scaling of vesicular glutamate and GABA transporter expression in rat neocortical circuits. J Neurosci 25:7121-7133.
McIntire SL, Reimer RJ, Schuske K, Edwards RH, Jorgensen EM (1997) Identification and characterization of the vesicular GABA transporter. Nature (Lond) 389:870-876.