

GABA Transporter (GAT) 1 Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1128

Specification

GABA Transporter (GAT) 1 Antibody - Product Information

Application	WB
Primary Accession	<u>P23978</u>
Reactivity	Rat
Predicted	Mouse
Host	Rabbit
Clonality	polyclonal
Calculated MW	67 KDa

GABA Transporter (GAT) 1 Antibody - Additional Information

Gene ID79212Gene NameSLC6A1Other NamesSodium- and chloride-dependent GABA transporter 1, GAT-1, Solute carrier family 6 member 1,
Slc6a1, Gabt1, Gat-1, Gat1

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

Dilution WB~~ 1:1000

Format Prepared from rabbit serum by affinity purification.

Antibody Specificity Specific for the ~67k GAT-1 protein. Immunolabeling is blocked by the peptide used as antigen.

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 GABA Transporter (GAT) 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

GABA Transporter (GAT) 1 Antibody - Protocols



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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GABA Transporter (GAT) 1 Antibody - Images



Western blot of rat hippocampal homogenate showing specificimmunolabeling of the \sim 67k GAT-1 protein.

GABA Transporter (GAT) 1 Antibody - Background

Gamma-aminobutyric acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system, causing a hyperpolarization of the membrane through the opening of a Cl– channel associated with the GABAA receptor (GABAA-R) subtype. GABA plasma membrane transporters (GATs) influence synaptic neurotransmission by high-affinity uptake and release of GABA. To date, four distinct GABA transporters have been identified: GAT-1, GAT-2, GAT-3, and BGT-1. GAT-1, the most abundant of the transporters, is found predominantly in neurons, but also in some specialized glia (Minelli et al., 1995). GAT-1 is thought to play a key role in epileptogenesis (Zhao et al. 2003).

GABA Transporter (GAT) 1 Antibody - References

Minelli A, Brecha NC, Karschin C, DeBiasi S, Conti F (1995) GAT-1, a high-affinity GABA plasma membrana transporter, is localizad to neurons and astroglia int he cerebral cortex. J. Neurosci. 15(11):7734-7746.

Zhao WJ, Ma YH, Fei J, Mei ZT, Guo LH (2003) Increase in drug-induced seizure susceptibility of transgenic mice overexpressing GABA transporter 1. Acta Pharmacol. Sin. 24(10):991-5.