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Anti-GABA Transporter (GAT) 1 Antibody

Our Anti-GABA Transporter (GAT) 1 primary antibody from PhosphoSolutions is rabbit polyclonal. It de
Catalog # AN1408

Product Information

Application	WB, IHC
Primary Accession	P23978
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	67001

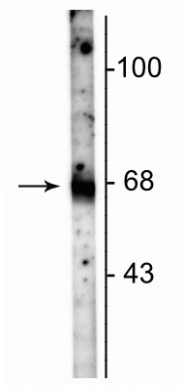
Additional Information

Gene ID	79212
Other Names	GABATHG antibody, GABATR antibody, GABT 1 antibody, GABT1 antibody, GAT-1 antibody, GAT1 antibody, SC6A1_HUMAN antibody, Slc6a1 antibody, Sodium and chloride dependent GABA transporter 1 antibody, Sodium- and chloride-dependent GABA transporter 1 antibody, Solute carrier family 6 (neurotransmitter transporter GABA) member 1 antibody, Solute carrier family 6 member 1 antibody
Target/Specificity	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 GABA-A receptor (GABA-A-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).
Dilution	WB~~1:1000 IHC~~1:100~500
Format	Affinity Purified
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	Anti-GABA Transporter (GAT) 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

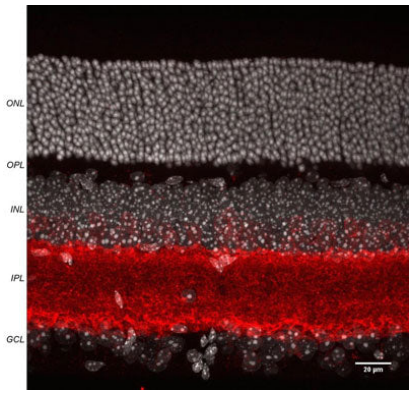
Background

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 GABA-A receptor (GABA-A-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).

Images



Western blot of rat hippocampal lysate showing specific immunolabeling of the ~67 kDa GAT-1 protein.



Immunoflouresence of mouse retina specifically labeling GAT-1 protein (cat. AN1408, red, 1:500) in the inner plexiform layer (IPL). The white identifies nuclei stained with DAPI. The retina was fixed with 4% paraformaldehyde for 30 minutes, embedded in 5% agarose, and sliced into 60 micron thick slices with a vibratome. The image is a Z-stack taken from a confocal microscope. Image courtesy of Andrea Wellington, Assistant Research Scientist, University of Arizona Physiology Dept.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.