PhosphoSolutions®
Antibodies that work™

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Anti-GABA Transporter (GAT) 2

Catalog Number: 881–GAT2 **Size:** 100 µl

Product Description: Affinity purified rabbit polyclonal antibody

Applications: **IHC**: 1:100-1:200 Not recommended for Western blotting.

Antigen: Peptide corresponding to amino acid residues from the C-terminal region of rat GAT-2.

Species reactivity: The antibody has been directly tested for reactivity in immunohistochemistry in rat cortex and retinal sections. It is anticipated that the antibody will also work in mouse sections based on the fact that this species has 100% homology with the amino acid sequence used as antigen.

Biological Significance: *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-2 is found in a wide range of neuronal and non-neuronal cells including dendrites and axon terminals as well as epithelial cells and cells forming the pia and arachnoid complex (Conti et al., 1999).

Purification Method: Prepared from rabbit serum by affinity purification.

Antibody Specificity: Specific for the ~82k GAT-2 protein.

Quality Control Tests: Immunohistochemistry performed on each lot.

References:

Conti F, Zucharello LV, Barbaresi P, Minelli A, Brecha NC, Melone M, (1999) Neuronal, glial, and epithelial localization of gamma-aminobutyric acid transporter 2, a high affinity gamma-aminobutyric acid plasma membrane transporter, in the cerebral cortex and neighboring structures. J. Comp Neurol. 409(3): 482-494.

WB = Western Blot **IF** = Immunofluorescence **IHC** = Immunohistochemistry **IP** = Immunoprecipitation
Packaging: 100 µl in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg BSA per ml and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots.
Storage and Stability. For long term storage –20°C is recommended. Stable at –20°C for at least 1 year.
Shipment: Domestic - Blue Ice; International – Blue Ice or Dry Ice.