



**PhosphoSolutions®**  
Antibodies that work™

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## Anti-GABA Transporter (GAT) 3

**Catalog Number:** 882-GAT3

**Size:** 100 µl

**Product Description:** Affinity purified rabbit polyclonal antibody

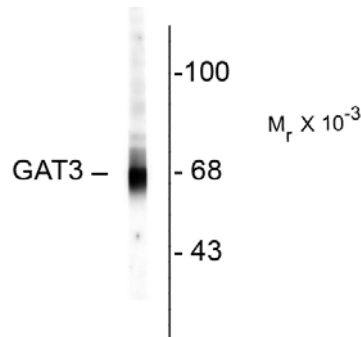
**Applications:** **WB:** 1:1000 **IHC:** 1:100-1:200

**Antigen:** Peptide corresponding to amino acid residues from the C-terminal region of rat GAT-3.

**Species reactivity:** The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will also react with mouse tissue 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<sup>-</sup> channel associated with the GABA<sub>A</sub> receptor (GABA<sub>A</sub>-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-3 has been found to be localized to astrocytes within the cerebral cortex indicating that this transporter mediates GABA uptake into glial cells (Minelli et al., 1996).

### Anti-GAT-3



**Western blot** of rat hippocampal homogenate showing specific immunolabeling of the ~67k GAT-3 protein.

**Purification Method:** Prepared from rabbit serum by affinity purification via chromatography with a column made with the peptide used as antigen.

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**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.

**Antibody Specificity:** Specific for the ~67k GAT-3 protein. Immunolabeling is blocked by the peptide used as antigen.

**Quality Control Tests:** Western blots performed on each lot.

**References:**

Minelli A, DeBiasi S, Brecha NC, Zuccarello LV, Conti F (1996) GAT-3, a high-affinity GABA plasma membrane transporter, is localized to astrocytic processes, and is not confined to the vicinity of GABAergic synapses in the cerebral cortex. *J. Neurosci.* 16(19):6255-64.

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