

GABA transporter 1

Cat.No. 274 102; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) (see remarks) IP: yes ICC: 1 : 500 up to 1 : 1000 IHC: 1 : 500 up to 1 : 1000 IHC-P/FFPE: 1 : 500
Immunogen	Synthetic peptide corresponding to AA 585 to 599 from mouse GABA transporter1 (UniProt Id: P31648)
Reactivity	Reacts with: rat (P23978), mouse (P31648). Other species not tested yet.
Specificity	Specific for GAT 1.
matching control	274-1P
Remarks	WB: GAT 1 aggregates after boiling, making it necessary to run SDS-PAGE with non-boiled samples.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

γ-aminobutyric acid (GABA) is a major inhibitory neurotransmitter. After the release of GABA from synaptic vesicles into the synaptic cleft during neurotransmission, **GABA transporters** (GATs) remove extracellular GABA by reuptake into the presynaptic terminal.

Three GABA transporters are described so far of which only GAT 1 and GAT 3 are expressed in the brain.

Selected General References

Substrate-mediated regulation of gamma-aminobutyric acid transporter 1 in rat brain.
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Regulation of a gamma-aminobutyric acid transporter by reciprocal tyrosine and serine phosphorylation.
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Functional regulation of gamma-aminobutyric acid transporters by direct tyrosine phosphorylation.
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Protein kinase C regulates the interaction between a GABA transporter and syntaxin 1A.
Beckman ML, Bernstein EM, Quick MW
The Journal of neuroscience : the official journal of the Society for Neuroscience (1998) 18(16): 6103-12.

Production of specific antibodies against GABA transporter subtypes (GAT1, GAT2, GAT3) and their application to immunocytochemistry.
Ikegaki N, Saito N, Hashima M, Tanaka C
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Structure, function and brain localization of neurotransmitter transporters.
Jursky F, Tamura S, Tamura A, Mandiyan S, Nelson H, Nelson N
The Journal of experimental biology (1994) 196: 283-95.