

Anti-GABA Transporter 1/GAT 1 Antibody
Catalog # ABO11031**Specification****Anti-GABA Transporter 1/GAT 1 Antibody - Product Information**

Application	WB, IHC
Primary Accession	P30531
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Sodium- and chloride-dependent GABA transporter 1(SLC6A1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GABA Transporter 1/GAT 1 Antibody - Additional Information

Gene ID 6529

Other Names

Sodium- and chloride-dependent GABA transporter 1, GAT-1, Solute carrier family 6 member 1, SLC6A1, GABATR, GABT1, GAT1

Calculated MW

67074 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Human, Mouse , By Heat
Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization

Cell membrane; Multi-pass membrane protein. Membrane; Multi-pass membrane protein. Localized at the plasma membrane and in a subset of intracellular vesicles. Localized at the presynaptic terminals of interneurons (By similarity). .

Protein Name

Sodium- and chloride-dependent GABA transporter 1(GAT-1)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human GABA Transporter 1(473-487aa WFYGVNRFYDNIQEM), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-GABA Transporter 1/GAT 1 Antibody - Protein Information

Name SLC6A1

Synonyms GABATR, GABT1, GAT1

Function

Mediates transport of gamma-aminobutyric acid (GABA) together with sodium and chloride and is responsible for the reuptake of GABA from the synapse (PubMed:30132828). The translocation of GABA, however, may also occur in the reverse direction leading to the release of GABA (By similarity). The direction and magnitude of GABA transport is a consequence of the prevailing thermodynamic conditions, determined by membrane potential and the intracellular and extracellular concentrations of Na(+), Cl(-) and GABA (By similarity). Can also mediate sodium- and chloride-dependent transport of hypotaurine but to a much lower extent as compared to GABA (By similarity).

Cellular Location

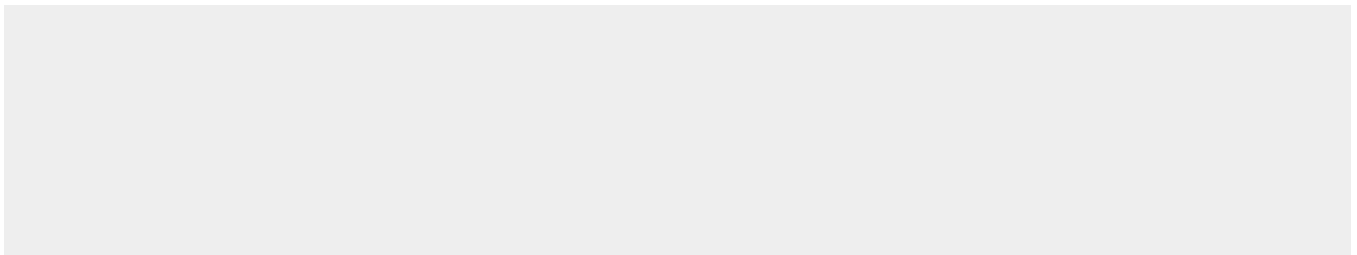
Cell membrane {ECO:0000250|UniProtKB:P23978}; Multi-pass membrane protein. Presynapse {ECO:0000250|UniProtKB:P31648}. Note=Localized at the presynaptic terminals of interneurons. {ECO:0000250|UniProtKB:P31648}

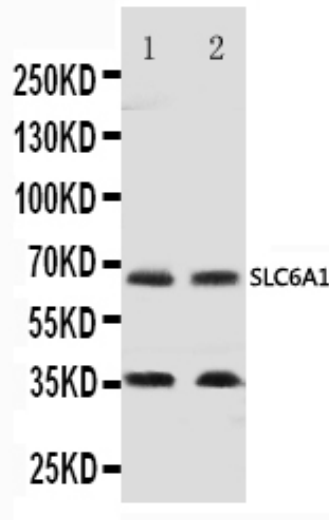
Anti-GABA Transporter 1/GAT 1 Antibody - Protocols

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

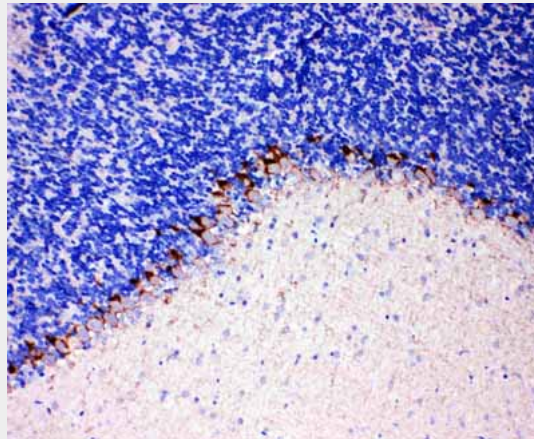
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GABA Transporter 1/GAT 1 Antibody - Images





Anti-GABA Transporter 1/GAT 1 antibody, ABO11031, Western blotting Lane 1: Rat Brain Tissue Lysate Lane 2: Mouse Brain Tissue Lysate



Anti-GABA Transporter 1/GAT 1 antibody, ABO11031, IHC(P)IHC(P): Rat Brain Tissue

Anti-GABA Transporter 1/GAT 1 Antibody - Background

GABA transporter 1 (GAT1), also known as sodium- and chloride-dependent GABA transporter 1, is a protein that in humans is encoded by the SLC6A1 gene. GABA Transporter 1 uses Na⁺ and Cl⁻ to create a gradient, which removes or adds GABA to extracellular spaces in the cerebrum and cerebellum. The stoichiometry for GABA Transporter 1 is 2 Na⁺: 1 Cl⁻: 1 GABA. The activity of GAT1 is largely dependent on the presence of Na⁺, while Cl⁻ assists by increasing the ability for GAT-1 to uptake GABA.