

Datasheet for 612-401-D56

GABA Transporter 1 (GAT1) Antibody**Overview**

Description:	Anti-GABA Transporter 1 (GAT1) (RABBIT) Antibody - 612-401-D56
Item No.:	612-401-D56
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Gamma-aminobutyric acid (GABA) Antibody detects GABA which 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 GABAA receptor (GABAA-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. GAT-1 is thought to play a key role in epileptogenesis. Anti-GAT1 Antibody is ideal for investigators involved in Neuroscience.
Synonyms:	Sodium- and chloride-dependent GABA transporter 1, Solute carrier family 6 member 1, GAT-1, Slc6a1, Gabt1, Gat1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Slc6a1
Reactivity:	Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-GABA Transporter 1 Antibody was produced in rabbit by repeated immunizations with synthetic peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH.
Purity/Specificity:	Anti-GABA Transporter 1 antibody is directed against rat GABA Transporter 1. GABA Transporter 1 antibodies are affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity is expected from the following species based on 100% sequence homology: mouse.
Relevant Links:	• UniProtKB - P23978 • GeneID - 79212 • UniProtKB - P23978.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-GAT1 (Rabbit) Antibody is tested for use in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 67 kDa in size corresponding to GABA Transporter 1 protein in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:100-200
WB:	1:1000

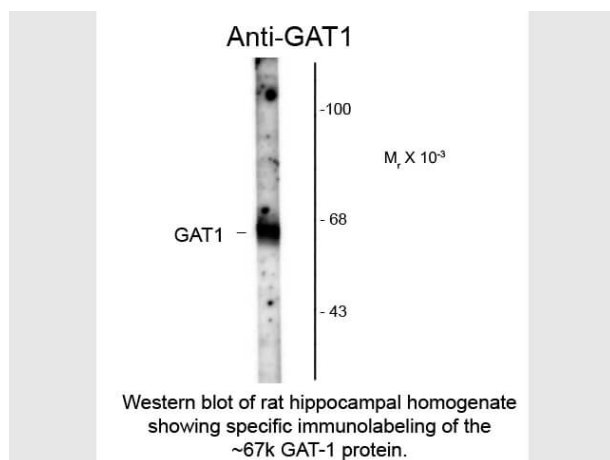
Formulation

Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit anti-GABA Transporter 1 (GAT1) antibody. Lane 1: rat hippocampal homogenate. Lane 2: none. Load: 10 μ g per lane. Primary antibody: GAT1 antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~ 67kDa/~67kDa for GAT-1 protein. Other band(s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.