

PRODUCT SPECIFICATION SHEET

GABA (Gamma-Amino Butyric Acid) Antibodies

Cat. # GABA11-A ,

Rabbit Anti-GABA (affinity pure)

SIZE: 100 ug

GABA is a major inhibitory neurotransmitter and the GABAergic transmission is terminated by the rapid Na⁺/Cl⁻-dependent uptake of through GABA transporters. It has been subdivided into neural and glial uptake systems on the basis of pharmacological properties. Recently, molecular cloning studies have identified multiple subtypes of GABA transporters (GAT1, GAT2, GAT3; and betaine GABA transporter (BGT-1). There is ~50% homology between various GABA transporter subtypes. GABA transporters are predicted to contain 12 potential transmembrane domains. The NH₂ and COOH-termini are predicted to be intracellular. Two of the high affinity (K_m~10 uM) rat GABA transporters (GAT2 and GAT3/GAT-B) share higher amino acid identity (68% and 65%, respectively) with the kidney betaine transporter than with GAT-1 (52% AA identity). GAT1 and GAT3 have been detected in various parts of the brain while GAT2 is found in many tissues. It appears that GAT1 and GAT3 are involved in distinct GABAergic transmission while GAT2 may be important in non-neural functions.

Source of Antigen and Antibodies

Antigen	GABA-BSA conjugate
Antibody host/type	Rabbit, Polyclonal IgG Cat. # GABA11-A, purified over antigen-Agarose and conjugated to BSA
Secondary Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as -ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20°C or below.

Shipping: 4°C for solutions and room temp for powder.

Recommended Usage

Western Blotting: 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

ELISA: 1:100K; using 50-100 ng control peptide/well.

Histochemistry & Immunofluorescence: Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

**This product is for In vitro research use only.*

Related material available from ADI

Antibodies for GAT1, GAT2 and GAT3; BGT-1, VGAT
Antibodies for Glutamate and VMATs

Western blot recycling kit (use the same blot for probing with various GABA or Glutamate Transporter antibodies)

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