Rat $GABA_B$ R2 N-Terminus Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1188

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat $GABA_B$ R2 N-Terminus in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat $GABA_B$ R2 Trp41-Ser482 (Phe337Tyr) Accession # O88871
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

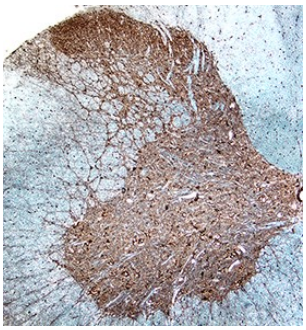
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Rat $GABA_B$ R2 N-Terminus
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	20 µg/mL	Rat brain tissue

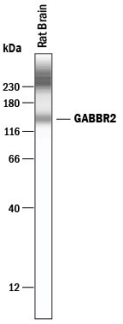
DATA

Immunohistochemistry



$GABA_B$R2 in Rat Spinal Cord. $GABA_B$R2 was detected in perfusion fixed frozen sections of rat spinal cord using Goat Anti-Rat $GABA_B$R2 N-Terminus Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1188) at 15 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # Catalog # VC004). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to dorsal horn. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

Simple Western



Detection of Rat $GABA_B$ R2 by Simple Western™. Simple Western lane view shows lysates of rat brain tissue, loaded at 0.2 mg/mL. A specific band was detected for $GABA_B$ R2 at approximately 148 kDa (as indicated) using 20 µg/mL of Goat Anti-Rat $GABA_B$ R2 N-Terminus Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1188) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

GABBR2 is half of a heterodimeric GPCR for GABA which mediates coupling to G proteins. B-type receptors for the neurotransmitter GABA (gamma-aminobutyric acid) inhibit neuronal activity through G protein-coupled second-messenger systems, which regulate the release of neurotransmitters and the activity of ion channels and adenylyl cyclase As a homodimer, GABBR2 is retained in the endoplasmic reticulum and endoplasmic reticulum-Golgi intermediate compartment. When GBR1/GBR2 heterodimers are present they are localized to the plasma membrane. GABBR2 is differentially expressed in the nervous system. GABBR2 and GABBR1 mRNA's are coexpressed in various brain regions such as the Purkinje cell layer of the cerebellum. In situ hybridization histochemistry using an antisensce probe to this novel receptor indicates GABBR2 is found exclusively in neurons. GABBR2 is implicated in synaptic inhibition, hippocampal long-term potentiation, slow wave sleep, muscle relaxation and nociception.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449