

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects rat GABA _B R2 in direct ELISAs. Detects mouse and rat GABA _B R2 in Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2605F
Purification	Protein A or G purified from egg yolks
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat GABA _B R2 Trp41-Ser482 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.

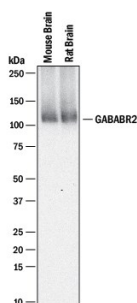
APPLICATIONS

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	1 µg/mL	Mouse brain tissue and Rat brain tissue
Simple Western	20 µg/mL	Rat brain tissue

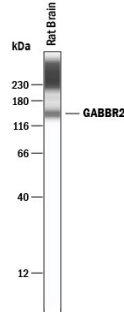
DATA

Western Blot



Detection of Mouse and Rat GABA_B R2 by Western Blot. Western blot shows lysates of mouse brain tissue and rat brain tissue. PVDF membrane was probed with 1 µg/mL of Rabbit Anti-Mouse/Rat GABA_B R2 Monoclonal Antibody (Catalog # MAB104561) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for GABA_B R2 at approximately 116 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

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 Rabbit Anti-Mouse/Rat GABA_B R2 Monoclonal Antibody (Catalog # MAB104561). 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 0.5 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. <ul style="list-style-type: none"> 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 antisense 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.