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## Product Information

### Anti-GABA<sub>B</sub> Receptor 2

produced in rabbit, affinity isolated antibody

Catalog Number **G9920**

#### Product Description

Anti- GABA<sub>B</sub> Receptor 2 ( $\gamma$ -aminobutyric acid receptor type B subunit 2; GABA<sub>B</sub>R2) is produced in rabbit using as immunogen the peptide CKDPIEDINSPEHIQRRLSL corresponding to residues 875-894 of human GABA<sub>B</sub>R2. The epitope is intracellular and located at the C-terminus. The antibody is affinity purified on immobilized antigen.

Anti-GABA<sub>B</sub> R2 antibody recognizes rat Gabbr2 (gene ID: 83633) by immunoblotting. Rat, mouse and bovine are 100% homologous.

GABA is the major inhibitory neurotransmitter in the central nervous system and plays a crucial role in the modulation of neuronal activity. The GABA transmitter interacts with three types of receptors: the ionotropic receptors GABA<sub>A</sub> and GABA<sub>C</sub> and the metabotropic GABA<sub>B</sub> receptor (GABA<sub>B</sub>R). The latter, belongs to the G-protein coupled receptor superfamily. GABA<sub>B</sub> receptors mediate slow synaptic inhibition in the brain and spinal cord. The functional GABA<sub>B</sub> receptor is a heterodimer that consists of two subunits, GABA<sub>B</sub>R1 and GABA<sub>B</sub>R2. Both GB1 and GB2 extracellular N-termini are required for normal coupling of GABA<sub>B</sub> receptors to their physiological effectors, G(i) and G-protein-activated potassium channels (GIRKs).

The GABA<sub>B</sub>R2 was shown to be essential for trafficking and for G-protein binding while the GABA<sub>B</sub> R1 subunit was demonstrated to be important for agonist and antagonist binding. GABA<sub>B</sub>R2 is highly expressed at brain especially at the cerebral cortex, thalamus, hippocampus, and spinal cord and to a lesser extent in testis.

#### Reagent

Supplied as lyophilized powder from phosphate buffered saline, pH 7.4, containing 1% BSA and 0.05% sodium azide.

#### Reconstitution

Reconstitute the lyophilized powder with 50  $\mu$ L or 200  $\mu$ L deionized water, depending on package size. Further dilutions should be made using a carrier protein such as BSA (1-3%).

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

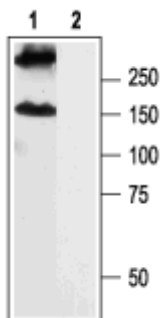
#### Storage/Stability

Lyophilized powder can be stored intact at room temperature for several weeks. For extended storage, it should be stored at  $-20^{\circ}\text{C}$  or below. The reconstituted solution can be stored at  $2-8^{\circ}\text{C}$  for up to 2 weeks. For longer storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers is not recommended. Centrifuge before use. Working dilution samples should be discarded if not used within 12 hours. The antibody is stable for at least 12 months when stored appropriately.

#### Product Profile

Immunoblotting: a recommended working dilution of 1:200 was determined using rat brain membranes

**Note:** In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.



### Immunoblot of rat brain membrane

Lane 1. Anti- GABA<sub>B</sub>R2 antibody, 1:200.

Lane 2. Anti- GABA<sub>B</sub>R2 antibody, preincubated with the control peptide antigen.

### References

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