Phospho-Ser783 GABAB R2 Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1125

Specification

Phospho-Ser783 GABAB R2 Antibody - Product Information

Application	**WB**
Primary Accession	O88871
Reactivity	**Rat**
Predicted	**Bovine, Chicken, Human, Mouse, Monkey**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**102 KDa**

Phospho-Ser783 GABAB R2 Antibody - Additional Information

Gene ID	**83633**
Gene Name	**GABBR2**

Other Names
Gamma-aminobutyric acid type B receptor subunit 2, GABA-B receptor 2, GABA-B-R2, GABA-BR2, GABABR2, Gb2, G-protein coupled receptor 51, Gabbr2, Gpr51

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser783 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephospho-peptide affinity columns.

Antibody Specificity
Specific for ~102k GABAB R2 phosphorylated at Ser783. Immunolabeling of the GABAB R2 band is completely blocked by λ-phosphatase treatment.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Phospho-Ser783 GABAB R2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
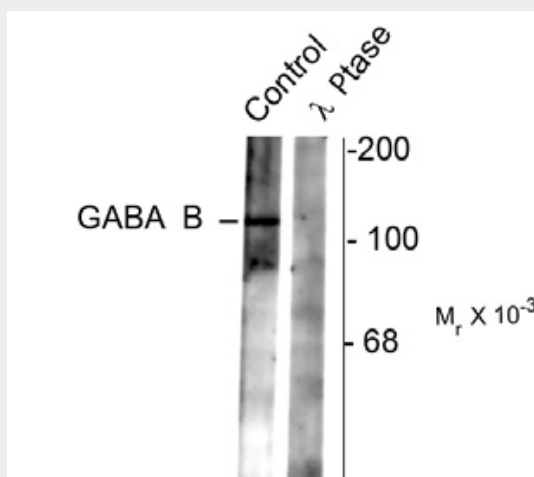
Shipping
Blue Ice

Phospho-Ser783 GABAB R2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Ser783 GABAB R2 Antibody - Images

Western blot of rat synaptic membrane showing specific immunolabeling of the~102 k GABAB R2 protein phosphorylated at Ser783 (control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ-Ptase). Theblot is identical to the control except that it was incubated in λ-Ptase (1200 unitsfor 30 min) before being exposed to the phospho-Ser783 GABAB antibody. The immunolabeling is completely eliminated by treatment with λ-Ptase.

Phospho-Ser783 GABAB R2 Antibody - Background

Gamma-aminobutyric acid (GABA) is the primary inhibitory neurotransmitter in the central nervous system. There are two major classes of GABA receptors: the GABAA and the GABAB subtype of receptors. GABAB receptors are heterodimeric G protein-coupled receptors that mediate slow synaptic inhibition in the central nervous system. It has recently been demonstrated that AMPK binds directly to GABAB receptors and phosphorylates S783 in the cytoplasmic tail of the R2 subunit and that S783 plays a critical role in enhancing neuronal survival after ischemia as phosphorylation of S783 is evident in many brain regions and is increased dramatically after ischemic injury to the brain (Kuramoto et al., 2007).

Phospho-Ser783 GABAB R2 Antibody - References

Kuramoto N, Wilkins ME, Fairfax BP, Revilla-Sanchez R, Terunuma M, Tamaki K, Iemata M, Warren N, Couve A, Calver A, Horvath Z, Freeman K, Carling D, Huang L, Gonzales C, Cooper E, Smart TG, Pangalos MN, Moss SJ (2007) Phospho-dependent functional modulation of GABA(B) receptors by the metabolic sensor AMP-dependent protein kinase. Neuron 53:233-247.