Datasheet for ABIN361471
anti-GABBR2 antibody (pSer783)

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Overview

Quantity:	100 μL
Target:	GABBR2
Binding Specificity:	pSer783
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser783 conjugated to KLH
Specificity:	Specific for ~102k GABAB R2 phosphorylated at Ser783. Immunolabeling of the GABAB R2 band is completely blocked by (-phosphatase treatment.
Cross-Reactivity:	Mouse (Murine), Rat (Rattus)
Predicted Reactivity:	bovine, canine, chicken, human, non-human primates, Xenopus
Purification:	Antigen Affinity Purified from Pooled Serum

Target Details

Target:	GABBR2
Alternative Name:	GABBR2 (GABBR2 Products)

Target Details

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). Anti-Phospho-Ser783 GABAB R2 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: (-Ptase). The blot is identical to the control except that it was incubated in (-Ptase (1200 units for 30 min) before being exposed to the phospho-Ser783 GABAB antibody. The immunolabeling is completely eliminated by treatment with (-Ptase.
Molecular Weight:	'102 kDa
Gene ID:	83633
UniProt:	O88871
Pathways:	cAMP Metabolic Process

Application Details

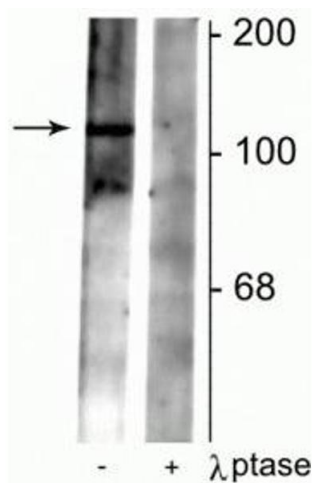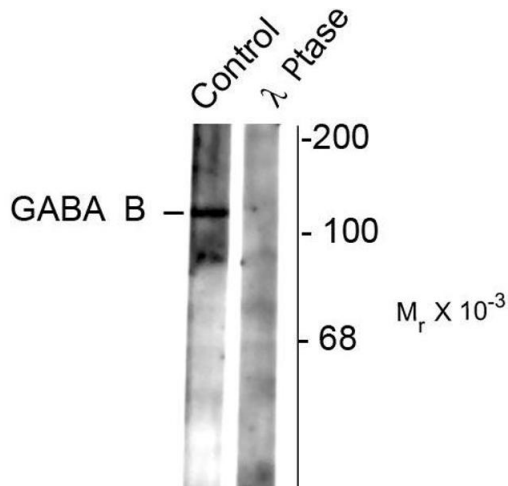|	
Application Notes:	Recommended Dilution: WB: 1:1000 IF: 1:500 (Kuramoto et al., 2007) Quality Control: Western blots performed on each lot.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 μL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 μg per ml BSA and 50 % glycerol.
Storage:	-20 °C

Publications

Product cited in:	Jiao, Wei, Chen, Li, Wang, Li, Guo, Zhang, Wei: "Cartilage oligomeric matrix protein and hyaluronic acid are sensitive serum biomarkers for early cartilage lesions in the knee joint." in:

Publications

Biomarkers : biochemical indicators of exposure, response, and susceptibility to chemicals,

Vol. 21, Issue 2, pp. 146-51, (2016) (PubMed).

Images

Western Blotting

Image 1. Western blots 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: (-Ptase). The blot is identical to the control except that it was incubated in (-Ptase (1200 units for 30 min) before being exposed to the phospho-Ser783 GABAB antibody. The immunolabeling is completely eliminated by treatment with (-Ptase.

Western Blotting

Image 2. Western blot of rat synaptic membrane lysate showing specific immunolabeling of the ~102 kDa GABAB R2 protein phosphorylated at Ser783 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 min).