

DESCRIPTION

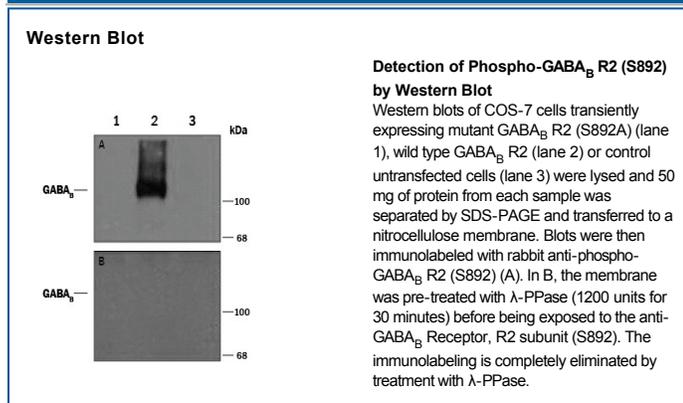
Species Reactivity	Human/Mouse/Rat/ <i>Xenopus</i>
Specificity	Human, mouse, rat, and <i>Xenopus</i> ~110 kDa GABA _B Receptor, R2 subunit phosphorylated at S892
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	Phosphopeptide corresponding to amino acid residues surrounding the phospho-S892 of GABA _B R2
Formulation	100 µL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA and 50% glycerol. See Certificate of Analysis for details.

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	1:1000 dilution	See Below
Immunofluorescence	1:100 - 1:250 dilution	(Couve, et al. 2002)

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	For long-term storage, ≤ -20° C is recommended. Product is stable at ≤ -20° C for at least 1 year.

BACKGROUND

The GABA-B (γ-aminobutyric acid-type B) receptors (GABA_BR) are C family members of the GPCR superfamily. There are only two family members, GABA_{RB1(a & b)} and GABA_{RB2}, which form a nondisulfide-linked heterodimeric receptor in the native state. GABA_{RB} heterodimers are found both pre- and post-synaptically, where they modulate glutamate release presynaptically, and prolong neuronal hyperpolarization postsynaptically. Rat GABA_{RB2} is a 110 kDa, 900 amino acid (aa), 7-transmembrane glycoprotein. It has an extended, 442 aa N-terminal extracellular region that contains the GABA binding site. Unlike most other GPCRs, PKA phosphorylation of the GABA_{B2} cytoplasmic tail does not promote GABA_{B2} internalization. To the contrary, phosphorylation of S892 promotes surface expression, while dephosphorylation promotes internalization. Across species (human to frog to mouse to rat), there is 88% aa identity in the 200 aa cytoplasmic tail, and 85% aa identity over the entire mature receptor.

References:

1. Kornau, H-C. (2006) Cell Tissue Res. 326:517.
2. Huang, Z. (2006) Neuron 50:521.
3. Fairfax, B.J. et al. (2004) J. Biol. Chem. 279:12565.
4. White, J.H. et al. (1998) Nature 396:679.
5. Kaupmann, K. et al. (1998) Nature 396:683.