

# p-GABA<sub>B</sub> R2 (Ser 893): sc-26129

## BACKGROUND

GAD-65 and GAD-67, glutamate decarboxylases, catalyze the production of GABA ( $\gamma$ -aminobutyric acid). In the central nervous system GABA ( $\gamma$ -aminobutyric acid) acts as the main inhibitory transmitter by increasing a Cl<sup>-</sup> conductance that inhibits neuronal firing. GABA activates both ionotropic (GABA<sub>A</sub>) and metabotropic (GABA<sub>B</sub>) receptors as well as a third class of receptors called GABA<sub>C</sub>. Members of the GABA<sub>A</sub> receptor family include GABA<sub>A</sub> R $\alpha$ 1-6, GABA<sub>A</sub> R  $\beta$ 1-3, GABA<sub>A</sub> R $\gamma$ 1-3, GABA<sub>A</sub> R $\delta$ , GABA<sub>A</sub> R $\epsilon$ , GABA<sub>A</sub> R $\rho$ 1 and GABA<sub>A</sub> R $\rho$ 2. The GABA<sub>B</sub> family is composed of GABA<sub>B</sub> R1 $\alpha$  and GABA<sub>B</sub> R1 $\beta$ . PKA phosphorylates GABA<sub>B</sub> R2 at Ser 893. This phosphorylation appears to enhance the membrane stability of GABA<sub>B</sub> R2.

## CHROMOSOMAL LOCATION

Genetic locus: GABBR2 (human) mapping to 9q22.33; Gabbr2 (mouse) mapping to 4 B1.

## SOURCE

p-GABA<sub>B</sub> R2 (Ser 893) is available as either goat (sc-26129) or rabbit (sc-26129-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing Ser 893 phosphorylated GABA<sub>B</sub> R2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26129 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

p-GABA<sub>B</sub> R2 (Ser 893) is recommended for detection of Ser 893 phosphorylated GABA<sub>B</sub> R2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p-GABA<sub>B</sub> R2 (Ser 893) is also recommended for detection of correspondingly phosphorylated Ser on GABA<sub>B</sub> R2 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for GABA<sub>B</sub> R2 siRNA (h): sc-42463, GABA<sub>B</sub> R2 siRNA (m): sc-42464, GABA<sub>B</sub> R2 shRNA Plasmid (h): sc-42463-SH, GABA<sub>B</sub> R2 shRNA Plasmid (m): sc-42464-SH, GABA<sub>B</sub> R2 shRNA (h) Lentiviral Particles: sc-42463-V and GABA<sub>B</sub> R2 shRNA (m) Lentiviral Particles: sc-42464-V.

Molecular Weight of p-GABA<sub>B</sub> R2: 105 kDa.

Molecular Weight of glycosylated p-GABA<sub>B</sub> R2: 130 kDa.

Positive Controls: Mouse brain extract: sc-2253 or rat brain extract: sc-2392.

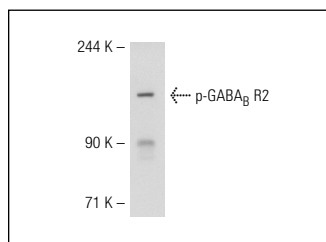
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

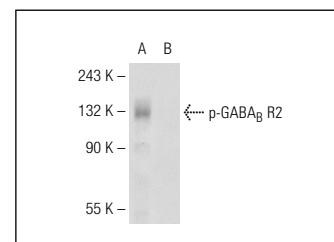
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: for goat primary antibody (26129): use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), for rabbit primary antibody (26129-R): use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent) and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: for goat primary antibody (26129): use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941, for rabbit primary antibody (26129-R): use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



p-GABA<sub>B</sub> R2 (Ser 893)-R: sc-26129-R. Western blot analysis of GABA<sub>B</sub> R2 phosphorylation in 293T whole cell lysate.



p-GABA<sub>B</sub> R2 (Ser 893)-R: sc-26129-R. Western blot analysis of GABA<sub>B</sub> R2 phosphorylation in untreated (A) and lambda protein phosphatase (sc-200312A) treated (B) mouse brain tissue extracts.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.