

## Datasheet: AHP1301

<b>Description:</b>	RABBIT ANTI GABA B RECEPTOR 2 (pSer783)
<b>Specificity:</b>	GABA B RECEPTOR 2 (pSer783)
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.1 ml

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting (1)	■			1/1000
Immunofluorescence	■			1/500

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

**(1) For the detection of phosphoproteins, tyrosine phosphatase inhibitors such as 1mM Sodium Orthovanadate should be added to the sample buffer. Milk or other casein-based blocking solutions are not recommended as casein is a phosphoprotein and its use can result in high background.**

<b>Target Species</b>	Rat
<b>Species Cross Reactivity</b>	Based on sequence similarity, is expected to react with: Mouse, Primate, Xenopus, Human, Bovine, Chicken <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified IgG - liquid
<b>Antiserum Preparation</b>	Antisera to GABA <sub>B</sub> receptor 2 were raised by repeated immunisations of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography.
<b>Buffer Solution</b>	HEPES buffered saline.
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 0.01% Bovine Serum Albumin

50% Glycerol

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**Immunogen** Synthetic phosphopeptide corresponding to an amino acid sequence within GABA<sub>B</sub> receptor 2, which includes the phosphorylated residue Ser783.

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**External Database**

**Links**

**UniProt:**

[O88871](#) [Related reagents](#)

**Entrez Gene:**

[83633](#) Gabbr2 [Related reagents](#)

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**Synonyms**

Gpr51

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**Specificity**

**Rabbit anti Rat GABA B receptor 2 (pSer783) antibody** recognizes gamma-aminobutyric acid type B receptor subunit 2 (GABA B receptor 2), also known as G-protein coupled receptor 51, when phosphorylated at serine 783.

GABA B receptors are heterodimeric G-protein coupled receptors which are important mediators of slow neuronal inhibition in the mammalian central nervous system. The functional expression of GABA B receptors on plasma membranes is dependent upon the co-expression of GABR1 (gamma-aminobutyric acid B (GABA B) receptor 1) and GABR2. Phosphorylation of GABR2 at the serine 783 site, by AMPK (5'AMP-activated protein kinase), is vital for enhancing the survival of neurons following ischemic brain injury.

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**Western Blotting**

AHP1301 detects a band of approximately 102kDa in rat synaptic membrane cell lysates.

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**References**

1. Kuramoto, N. *et al.* (2012) Dephosphorylation of endogenous GABA(B) receptor R2 subunit and AMPK  $\alpha$  subunits which were measured by in vitro method using transfer membrane. [Neurochem Int. pii: S0197-0186\(12\)00393-2.](#)

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**Further Reading**

1. Bowery, N.G. *et al.* (2002) International Union of Pharmacology XXXIII. Mammalian gamma-aminobutyric acid<sub>B</sub> receptors: structure and function. [Pharmacol. Rev. 54: 247-264.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Shelf Life**

12 months from date of despatch.

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**Health And Safety Information**

Material Safety Datasheet documentation available at:

Material Safety Datasheet Documentation #10088 available at:

<https://www.bio-rad-antibodies.com/uploads/MSDS/10088.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...)

[FITC](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)  
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)  
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)  
Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)  
Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),  
[DyLight®680](#), [DyLight®800](#)

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