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# Datasheet for 612-401-D53 GABA(B) Receptor 2 phospho S783 Antibody

#### **Overview**

Description:	Anti-GABA(B) Receptor 2 pS783 (RABBIT) Antibody - 612-401-D53
Item No.:	612-401-D53
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

## **Product Details**

Background:	Anti-GABA(B) Receptor 2 pS783 Antibody detects phosphorylated GABA(B) Receptor 2. 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. GABA(B) Receptor 2 pS783 antibody is ideal for investigators involved in Neuroscience.
Synonyms:	Gamma-aminobutyric acid type B receptor subunit 2, GABA-B-R2, GABA-BR2, GABABR2, Gb2, G- protein coupled receptor 51
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	lgG

## **Target Details**

Gene Name:	Gabbr2
Reactivity:	Mouse, Rat
PTM Specificity:	Phosphorylation



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Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-GABA(B) Receptor 2 pS783 Antibody was produced by repeated immunizations with synthetic phospho-peptide corresponding to amino acid residues surrounding Ser 783 of rat GABAB R2.
Purity/Specificity:	Anti-GABA(B) Receptor 2 pS783 Antibody is directed against rat phosphorylated GABA(B) Receptor 2. The antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Immunolabeling of the GABAB R2 band is completely blocked by lambda- phosphatase treatment. Reactivity is expected from the following species based on 100% sequence homology: bovine, canine, chicken, human, mouse, Xenopus and non-human primates.
Relevant Links:	<ul> <li>UniProtKB - 088871</li> <li>GeneID - 83633</li> <li>NCBI - 8393403</li> </ul>

## **Application Details**

Tested Applications:	IHC, WB
Application Note:	Anti-GABA(B) Receptor 2 pS783 (Rabbit) antibody is tested for use in Western Blotting, ICC, and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 102 kDa in size corresponding to GABA(B) receptor 2 protein phosphorylated at Ser783 in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	1:500
WB:	1:1000

# Formulation

Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

# **Shipping & Handling**

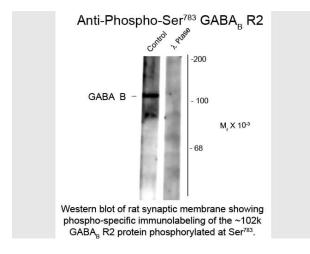
Shipping Condition:	Dry Ice
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Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

#### Images



#### Western Blot

Western Blot of Rabbit anti-GABA(B) Receptor 2 pS783 antibody. Lane 1: rat synaptic membrane. Lane 2: rat synaptic membrane incubated in  $\lambda$ -Ptase (1200 units for 30 min). Load: 10 µg per lane. Primary antibody: GABAB-R antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800<sup>™</sup> rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~102 kDa/~102 kDa for GABAB R2 protein phosphorylated at Ser783. Other band(s): none.

## References

• Wu RN, Kuo CC, Min MY, Chen RF, Yang HW. Extracellular Signal-Regulated Kinases Mediate an Autoregulation of GABAB-Receptor-Activated Whole-Cell Current in Locus Coeruleus Neurons. *Sci Rep.* (2020)

## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.