antibodies

# Datasheet for ABIN2484100 anti-GABBR1 antibody (AA 873-977) (Biotin)





Overview

Quantity:	100 µg
Target:	GABBR1
Binding Specificity:	AA 873-977
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This GABBR1 antibody is conjugated to Biotin
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

# Product Details

Immunogen:	Fusion protein amino acids 873-977 (cytoplasmic C-terminus) of rat GABA(B)R1
Clone:	S93A-49
lsotype:	lgG1
Specificity:	Detects ~115 kDa. No cross-reactivity against GABA(B)R2.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

# Target Details

Target:	GABBR1
Alternative Name:	GABA B Receptor 1 (GABBR1 Products)

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/4 | Product datasheet for ABIN2484100 | 09/11/2023 | Copyright antibodies-online. All rights reserved.

l'arget Details		
Background:	GABA (y-aminobutyric acid) is the primary inhibitory neurotransmitter in the central nervous	
	system and interacts with three different receptors: GABA(A), GABA(B) and GABA(C) receptor.	
	The ionotropic GABA(A) and GABA(C) receptors are ligand-gated ion channels that produce fast	
	inhibitory synaptic transmission. In contrast, the metabotropic GABA(B) receptor is coupled to	
	G proteins that modulate slow inhibitory synaptic transmission (1). Functional GABA(B)	
	receptors form heterodimers of GABA(B)R1 and GABA(B)R2 where GABA(B)R1 binds the ligand	
	and GABA(B)R2 is the primary G protein contact site (2). Two isoforms of GABA(B)R1 have	
	been cloned: GABA(B)R1a is a 130 kD protein and GABA(B)R1b is a 95 kD protein (3). G proteins	
	subsequently inhibit adenyl cylase activity and modulate inositol phospholipid hydrolysis.	
	GABA(B) receptors have both pre- and postsynaptic inhibitions: presynaptic GABA(B) receptors	
	inhibit neurotransmitter release through suppression of high threshold calcium channels, while	
	postsynaptic GABA(B) receptors inhibit through coupled activation of inwardly rectifying	
	potassium channels. In addition to synaptic inhibition, GABA(B) receptors may also be involved	
	in hippocampal long-term potentiation, slow wave sleep and muscle relaxation (1).	
Gene ID:	81657	
NCBI Accession:	NP_112290	
UniProt:	Q9Z0U4	
Pathways:	Positive Regulation of Peptide Hormone Secretion, cAMP Metabolic Process	
Application Details		
Application Notes:	• WB (1:1000)	
	<ul> <li>optimal dilutions for assays should be determined by the user.</li> </ul>	
Comment:	1 $\mu$ g/ml of ABIN2484100 was sufficient for detection of GABA(B)R1 in 20 $\mu$ g of rat brain	
	membrane lysate and assayed by colorimetric immunoblot analysis using goat anti-mouse	
	IgG:HRP as the secondary antibody.	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Concentration:	1 mg/mL	
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated	
Preservative:	Sodium azide	

Target Details

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/4 | Product datasheet for ABIN2484100 | 09/11/2023 | Copyright antibodies-online. All rights reserved.

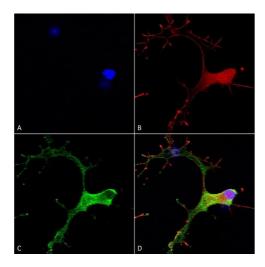
		1.
_	Lond	lina
	land	1111(1
	1 a i i a	

 Precaution of Use:
 This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

 Storage:
 4 °C

 Storage Comment:
 Conjugated antibodies should be stored at 4°C

## Images

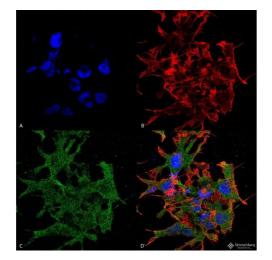


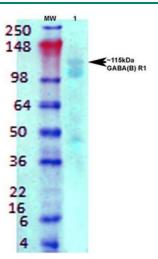
## Immunocytochemistry

Immunocytochemistry/Immunofluorescence 1. Image analysis using Mouse Anti-GABA-B Receptor 1 Monoclonal S93A-49 (ABIN2484100). Antibody, Clone Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-GABA-B Receptor 1 Monoclonal Antibody (ABIN2484100) at 1:50 for overnight at 4 °C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain, Hoechst (blue) nuclear stain at 1:800, 1.6 mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) GABA-B Receptor 1 Antibody (D) Composite.

### Immunofluorescence (fixed cells)

**Image 2.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GABA-B Receptor 1 Monoclonal Antibody, Clone S93A-49 . Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-GABA-B Receptor 1 Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) GABA-B Receptor 1 Antibody (D) Composite.





### Western Blotting

**Image 3.** Western Blot analysis of Rat brain membrane Iysate showing detection of GABA B Receptor 1 protein using Mouse Anti-GABA B Receptor 1 Monoclonal Antibody, Clone S93A-49 . Primary Antibody: Mouse Anti-GABA B Receptor 1 Monoclonal Antibody at 1:1000.

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 4/4 | Product datasheet for ABIN2484100 | 09/11/2023 | Copyright antibodies-online. All rights reserved.