

**bs-1232R****[ Primary Antibody ]****GABRA1/GABA A Receptor alpha 1 Rabbit pAb****Bioss**  
**ANTIBODIES**

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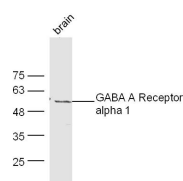
sales@bioss.com.cn

techsupport@bioss.com.cn

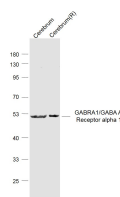
400-901-9800

**— DATASHEET —**

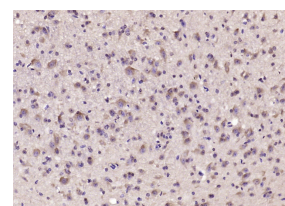
<b>Host:</b> Rabbit	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000)
<b>Clonality:</b> Polyclonal		<b>IHC-P</b> (1:100-500)
<b>GeneID:</b> 2554	<b>SWISS:</b> P14867	<b>IHC-F</b> (1:100-500)
<b>Target:</b> GABRA1/GABA A Receptor alpha 1		<b>IF</b> (1:100-500)
<b>Immunogen:</b> KLH conjugated synthetic peptide derived from human GABRA1: 301-450/456.		<b>Reactivity:</b> Mouse, Rat (predicted: Human, Cow, Chicken, Dog, Horse)
<b>Purification:</b> affinity purified by Protein A		
<b>Concentration:</b> 1mg/ml		<b>Predicted MW.:</b> 52 kDa
<b>Storage:</b> 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.		<b>Subcellular Location:</b> Cell membrane
<b>Background:</b> GAD-65 and GAD-67, glutamate decarboxylases, function to catalyze the production of GABA (g-aminobutyric acid). In the central nervous system GABA functions as the main inhibitory transmitter by increasing a Cl <sup>-</sup> conductance that inhibits neuronal firing. GABA has been shown to activate both ionotropic (GABAA) and metabotropic (GABAB) receptors as well as a third class of receptors called GABAC. Both GABAA and GABAC are ligand-gated ion channels, however, they are structurally and functionally distinct. Members of the GABAA receptor family include GABAA R alpha 1-6, GABAA R beta 1-3, GABAA R $\alpha$ 1-3, GABAA R $\delta$ , GABAA R gamma, GABAA R delta 1 and GABAA R delta 2. The GABAB family is composed of GABAB R1 alpha and GABAB R1 beta. GABA transporters have also been identified and include GABA T-1, GABA T-2 and GABA T-3 (also designated GAT-1, -2 and -3). The GABA transporters function to terminate GABA action.		

**— VALIDATION IMAGES —**

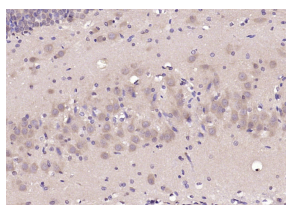
Sample: Brain (Mouse) Lysate at 40 ug Primary: Anti-GABA A Receptor (bs-1232R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution Predicted band size: 52 kD Observed band size: 52 kD



Sample: Cerebrum (Mouse) Lysate at 40 ug Primary: Anti-GABRA1/GABA A Receptor alpha 1 (bs-1232R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 52 kD Observed band size: 52 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GABRA1 GABA A Receptor alpha 1) Polyclonal Antibody, Unconjugated (bs-1232R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GABRA1 GABA A Receptor alpha 1) Polyclonal Antibody, Unconjugated (bs-1232R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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## — SELECTED CITATIONS —

- **[IF=6.083]** Kumar, Subodh. et al. Synaptosome microRNAs regulate synapse functions in Alzheimer' s disease. NPJ GENOM MED. 2022 Aug;7(1):1-15 WB ;Human. 35941185
- **[IF=6.1]** Sharma Bhupender. et al. MicroRNA-502-3p regulates GABAergic synapse function in hippocampal neurons. NEURAL REGEN RES. 2024 Mar;;10.4103/NRR.NRR WB ;Mouse. 38595288
- **[IF=3.3]** Fengjin He. et al. Therapeutic potential of Rosa roxburghii folium extract in insomnia treatment: a comprehensive evaluation of behavioral and neurochemical effects in a PCPA-induced mouse model. J SCI FOOD AGR. 2024 Sep;; WB ;Mouse. 39286895
- **[IF=2]** H Liu. et al. Etomidate ameliorates Alzheimer-like neuropathology and cognitive impairment in APP/PS1 mice..JOURNAL OF PHYSIOLOGY AND PHARMACOLOGY.2025 Feb;76(1). Western blot ;Mouse. 40137847