

# GABA A Receptor a3 Antibody

Catalog No: #21445



Package Size: #21445-1 50ul #21445-2 100ul #21445-4 25ul

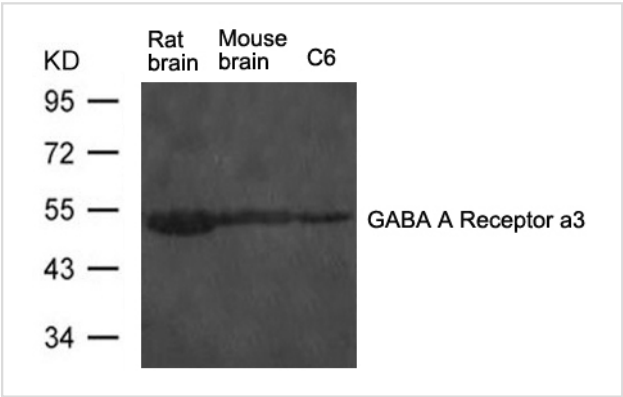
## Overview

Product Name	GABA A Receptor a3 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB
Species Reactivity	Hu Rt Ms
Immunogen Type	Peptide-KLH
Target Name	GABA A Receptor a3
Alternative Names	Gamma-aminobutyric acid receptor subunit alpha-3; Gabra3;

## Application Details

Predicted MW: 51kd
Western blotting: 1:500~1:1000

## Images



Western blot analysis of extract from rat brain and mouse brain tissue and C6 cells using GABA A Receptor a3 Antibody #21445

## Descriptions

Immunogen	Peptide sequence around aa. 33~37(R-R-Q-E-P)derived from Rat GABA A Receptor a3.
Specificity	The antibody detects endogenous level of total GABA A Receptor a3 protein.
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.
Accession NO.	Swiss-Prot: P20236NCBI Protein: NP_058765.1

## Related Information

GABA (g-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 cyclase 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).

Jones, K.A. et al. (2000) Neuropsychopharmacology 23, S41-9.

Duthey, B. et al. (2002) J Biol Chem 277, 3236-41.

Kaupmann, K. et al. (1997) Nature 386, 239-46.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.