



# Rabbit Anti-GABRA6 polyclonal antibody (CABT-RM100)

This product is for research use only and is not intended for diagnostic use.

# PRODUCT INFORMATION

Specificity	Detects GABA A receptor alpha 6 subunit. It targets an epitope with in 16 amino acids from the N-terminal region.
Target	GABRA6
Immunogen	KLH-conjugated linear peptide corresponding to 16 amino acids from the N-terminal region of bovine GABA A receptor alpha 6 subunit.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Bovine, Rat
Purification	Affinity Purified
Conjugate	unconjugated
Applications	WB, IHC
Epitope	N-terminus
Molecular Weight	~51 kDa observed; 51.03 kDa calculated. Uncharacterized bands may be observed in some lysate(s).
Format	Liquid
Size	100 μg
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl

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**Storage** 

Stable for 1 year at 2-8°C from date of receipt.

### **BACKGROUND**

#### Introduction

Gamma-aminobutyric acid type A receptor alpha 6 subunit is encoded by the GABRA6 gene in bovine. GABA is the major inhibitory neurotransmitter in the central nervous system that inhibits the generation of the action potential of the neuron. It is involved in the pathogenesis of certain neurological and psychiatric disorders. GABA is produced from glutamic acid in a reaction catalyzed by glutamic acid decarboxylase. GABA interacts with the GABAA and GABAB receptors, which are widely distributed throughout the nervous system and in a variety of cell types. They differ in their pharmacological, electrophysiological, and biochemical properties. GABAA-receptor are pentameric membrane proteins that mediate an increase in membrane conductance with an equilibrium potential near the resting level of 70 mV. This conductance increase often is accompanied by a membrane hyperpolarization, which later results in a reduction in the probability of action potential initiation. The reduction in membrane resistance is accomplished by the GABA-dependent facilitation of chloride ion influx. Mos GABA A receptors contain one type of alpha and beta subunit, and a single gamma polypeptide in a ratio of 2:2:1. GABA A receptor alpha 6 subunit is synthesized with a signal peptide (aa 1-19), which is cleaved off in the mature form. It contains four transmembrane domains (aa 240-262, 274-293, 305-328, and 423-441).

#### **Keywords**

GABRA6; gamma-aminobutyric acid (GABA) A receptor, alpha 6; gamma-aminobutyric acid receptor subunit alpha-6; GABA(A) receptor; alpha 6; GABA(A) receptor, alpha 6; GABA subunit A receptor alpha 6; GABA(A) receptor subunit alpha-6; MGC116903; MGC116904

## **GENE INFORMATION**

Entrez Gene ID <u>539194</u>

UniProt ID <u>E1BE96</u>

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