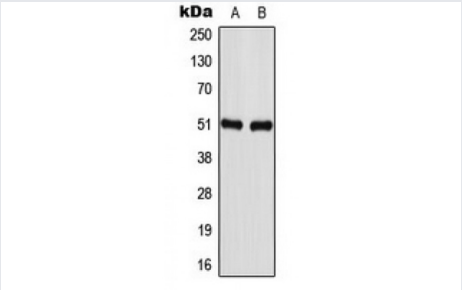
# GABRA1 Antibody – Rabbit Polyclonal

## PRODUCT OVERVIEW

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| **Product Name** | GABRA1, Polyclonal Antibody |
| **Full Product Name** | GABRA1 Antibody |
| **Product Gene Name** | anti-GABRA1 antibody |
| **Product Synonym Names** | Purified Polyclonal GABRA1 Antibody; Polyclonal GABRA1 antibody; Anti-GABRA1 antibody; Gamma-aminobutyric acid receptor subunit alpha-1 antibody; GABA(A) receptor subunit alpha-1 antibody |
| **Clonality** | Polyclonal |
| **Host** | Rabbit |
| **Form/Format** | Supplied in liquid form in 0.42% Potassium Phosphate, 0.87% Sodium Chloride, pH 7.3 with 30% Glycerol and 0.01% Sodium Azide |
| **Purity/Purification** | Immunogen Affinity Chromatography |
| **Specificity** | Recognizes endogenous levels of GABRA1 protein |
| **Preparation and Storage** | Store at 4 degree C for short term storage. For long term, aliquot and store at -20 degree C. Avoid repeat freeze/thaw cycles. |
| **OMIM** | gene 611136 |
| **3D Structure** | ModBase 3D Structure for P14867 |
| **Immunogen** | GABRA1 antibody was raised in Rabbit using a KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GABRA1 as the immunogen |
| **Cross-Reactivity** | Mouse, Rat, Bovine, Chicken, Monkey |
| **Product Categories/Family for anti-GABRA1 antibody** | Signal Transduction |
| **Applications Tested/Suitable for anti-GABRA1 antibody** | Western Blot (WB) |
| **Application Notes for anti-GABRA1 antibody** | WB: 1:500-1:1000 |
| **Related Product Information for anti-GABRA1 antibody** | GABRA1 is a gamma-aminobutyric acid (GABA) receptor. GABA is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA-A receptors, which are ligand-gated chloride channels. Chloride conductance of these channels can be modulated by agents such as benzodiazepines that bind to the GABA-A receptor. |
| **Other Notes** | Small volumes of anti-GABRA1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for GABRA1 purchase** | MBS5316160 is an antibody targeting GABRA1. Also known as GABRA1 Antibody. Host: Rabbit. |




**Western Blot (WB) of anti-GABRA1 antibody**
Western blot analysis of GABRA1 expression in U87MG (A); NIH3T3 (B) whole cell lysates.

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GABRA1. It may not necessarily be applicable to this product.

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| **NCBI GI #** | 189083734 |
| **NCBI GeneID** | 2554 |
| **UniProt Primary Accession #** | P14867 |
| **UniProt Related Accession #** | P14867 |
| **GenBank Nucleotide #** | NP_001121120.1 |
| **NCBI Official Full Name** | gamma-aminobutyric acid receptor subunit alpha-1 |
| **NCBI Official Synonym Full Names** | gamma-aminobutyric acid type A receptor alpha1 subunit |
| **NCBI Official Symbol** | GABRA1 |
| **NCBI Official Synonym Symbols** | EJM; ECA4; EJM5; EIEE19 |
| **UniProt Protein Name** | Gamma-aminobutyric acid receptor subunit alpha-1 |
| **UniProt Synonym Protein Names** | GABA(A) receptor subunit alpha-1 |
| **Protein Family** | Gamma-aminobutyric acid receptor |
| **UniProt Gene Name** | GABRA1 |
| **UniProt Entry Name** | GBRA1_HUMAN |
| **NCBI Protein Information** | gamma-aminobutyric acid receptor subunit alpha-1 |
| **NCBI Summary for GABRA1** | This gene encodes a gamma-aminobutyric acid (GABA) receptor. GABA is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA-A receptors, which are ligand-gated chloride channels. Chloride conductance of these channels can be modulated by agents such as benzodiazepines that bind to the GABA-A receptor. GABA-A receptors are pentameric, consisting of proteins from several subunit classes: alpha, beta, gamma, delta and rho. Mutations in this gene cause juvenile myoclonic epilepsy and childhood absence epilepsy type 4. Multiple transcript variants encoding the same protein have been identified for this gene. [provided by RefSeq, Jul 2008] |

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| **UniProt Comments for GABRA1** | GABRA1: GABA, the major inhibitory neurotransmitter in the vertebrate brain, mediates neuronal inhibition by binding to the GABA/benzodiazepine receptor and opening an integral chloride channel. Defects in GABRA1 are the cause of childhood absence epilepsy type 4 (ECA4). A subtype of idiopathic generalized epilepsy characterized by onset at age 6-7 years, frequent absence seizures (several per day) and bilateral, synchronous, symmetric 3-Hz spike waves on EEG. During adolescence, tonic-clonic and myoclonic seizures may develop. Absence seizures may either remit or persist into adulthood. Defects in GABRA1 are the cause of juvenile myoclonic epilepsy type 5 (EJM5). A subtype of idiopathic generalized epilepsy. Patients have afebrile seizures only, with onset in adolescence (rather than in childhood) and myoclonic jerks which usually occur after awakening and are triggered by sleep deprivation and fatigue. Belongs to the ligand-gated ion channel (TC 1.A.9) family. Gamma-aminobutyric acid receptor (TC 1.A.9.5) subfamily. GABRA1 sub-subfamily.<br><br>Protein type: Membrane protein, integral; Channel, ligand-gated; Transporter, ion channel; Membrane protein, multi-pass; Transporter<br><br>Chromosomal Location of Human Ortholog: 5q34<br><br>Cellular Component: postsynaptic membrane; integral to plasma membrane; plasma membrane; cell junction<br><br>Molecular Function: chloride channel activity; GABA-A receptor activity; GABA receptor activity; drug binding; extracellular ligand-gated ion channel activity<br><br>Biological Process: synaptic transmission; transport; synaptic transmission, GABAergic; transmembrane transport; gamma-aminobutyric acid signaling pathway<br><br>Disease: Epilepsy, Idiopathic Generalized, Susceptibility To, 13; Epileptic Encephalopathy, Early Infantile, 19 |
| **Research Articles on GABRA1** | **1.** GHRH expression was significantly increased in patients with temporal lobe epilepsy. Coimmunoprecipitation confirmed that GHRH interacted with GABAAalpha1 and GABAAbeta2 + 3. GHRH may play an important role in inhibiting seizures by activating GABAARs. |
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