

GABRB1 Recombinant Rabbit mAb

Catalog # AP96646

Product Information

Application	WB
Reactivity	Rat, Mouse
Predicted	Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	51 KDa
Physical State	Liquid
Immunogen	A synthesized peptide derived from human GABRB1
Epitope Specificity	371-400
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS(pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	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.
SUBUNIT	Binds UBQLN1. Generally pentameric. There are five types of GABA(A) receptor chains: alpha, beta, gamma, delta, and rho. Interacts with TRAK1.
DISEASE	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) [MIM:611136]. 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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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-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 γ 1-3, GABAA R δ , 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.

Additional Information

Other Names	DEE45; EIEE45; B230208N19Rik; Gabrb-1; GARB1; GBRB1_HUMAN; GABRB1; GABA(A) receptor subunit beta-1 (GABAAR subunit beta-1); GBRB1_MOUSE; GBRB1_RAT; gamma-aminobutyric acid type A receptor subunit beta1; gamma-aminobutyric acid (GABA) A receptor, beta 1; GABA(A) receptor, beta 1
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Name	GABRB1 Recombinant Rabbit mAb
Function	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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.