ARG65355
anti-GABAB Receptor 2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GABAB Receptor 2
Tested Reactivity	Ms, Rat
Predict Reactivity	Hu
Tested Application	ICC/IF, WB
Specificity	The polyclonal antibody recognizes Cterminus of gammaaminobutyric acid (GABA) B receptor 2 (recognized epitope: the last 23 aa). GB2 apparent MW ~120 kDa
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GABAB Receptor 2
Species	Human
Immunogen	Synthetic peptide (coupled with THG) derived from the last 23 aa of mouse GABA B receptor 2. 100% homology with human GB2.
Conjugation	Un-conjugated
Alternate Names	HRIHFB2099; GABA-B receptor 2; GABA-B-R2; GPRC3B; GABA-BR2; G-protein coupled receptor 51; GPR51; GABABR2; Gamma-aminobutyric acid type B receptor subunit 2; HG20; Gb2

Application Instructions

Application table

Application	Dilution
ICC/IF	Assay-dependent
WB	0.6 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

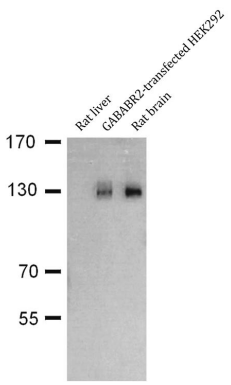
Form	Liquid
Purification	Purified from rabbit serum by protein-G affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

	freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 242425 Mouse GeneID: 83633 Rat Swiss-port # Q88871 Rat Swiss-port # Q80T41 Mouse
Gene Symbol	GABBR2
Gene Full Name	gamma-aminobutyric acid (GABA) B receptor, 2
Background	GABA B receptor is a G-protein-coupled inhibitory receptor of gamma-aminobutyric acid (GABA), and has important functions in brain by inhibition of adenylyl cyclase and modulation of G-protein-gated Ca^{2+} and K^{+} channels. GABA B receptor is comprised of two subunits, GB1 and GB2 with N-terminal extracellular and C-terminal intracellular domains. The GB1 subunit plays a critical role in ligand binding, whereas the GB2 subunit contains the determinants required for G-protein signaling. Multiple allosteric interactions between the two subunits are required for correct functioning of the receptor. There are two N-terminal splice variants of GB1 subunit, termed GB1a and GB1b; their expression in the central nervous system changes during the ontogenesis and differs between various regions of the brain.
Function	Component of a heterodimeric G-protein coupled receptor for GABA, formed by GABBR1 and GABBR2. Within the heterodimeric GABA receptor, only GABBR1 seems to bind agonists, while GABBR2 mediates coupling to G proteins. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase. Signaling inhibits adenylate cyclase, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipid hydrolysis. Plays a critical role in the fine-tuning of inhibitory synaptic transmission. Pre-synaptic GABA receptor inhibits neurotransmitter release by down-regulating high-voltage activated calcium channels, whereas postsynaptic GABA receptor decreases neuronal excitability by activating a prominent inwardly rectifying potassium (Kir) conductance that underlies the late inhibitory postsynaptic potentials. Not only implicated in synaptic inhibition but also in hippocampal long-term potentiation, slow wave sleep, muscle relaxation and antinociception. [UniProt]
Research Area	Neuroscience antibody
Calculated Mw	106 kDa

Images



ARG65355 anti-GABAB Receptor 2 antibody WB image

Western blot: Rat liver, GABABR2-transfected HEK292 cells and Rat brain lysates stained with ARG65355 anti-GABAB Receptor 2 antibody.