ARG22242
anti-GABAB Receptor 2 antibody [S81-2]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [S81-2] recognizes GABAB Receptor 2
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC, WB
Specificity	Detects ~105kDa. No cross-reactivity against GABA(B)R1.
Host	Mouse
Clonality	Monoclonal
Clone	S81-2
Isotype	IgG1
Target Name	GABAB Receptor 2
Species	Rat
Immunogen	Fusion protein around aa. 861-912 of Rat GABA B Receptor 2
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
IHC	Assay-dependent
WB	1:1000

Application Note

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

Properties

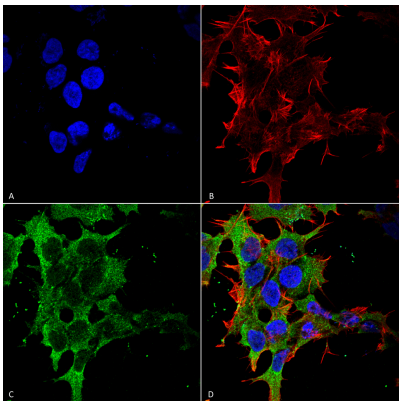
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. 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

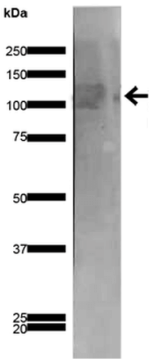
Gene Symbol	Gabbr2
Gene Full Name	gamma-aminobutyric acid (GABA) B receptor 2
Background	The multi-pass membrane protein encoded by this gene belongs to the G-protein coupled receptor 3 family and GABA-B receptor subfamily. The GABA-B receptors inhibit neuronal activity through G protein-coupled second-messenger systems, which regulate the release of neurotransmitters, and the activity of ion channels and adenylyl cyclase. This receptor subunit forms an active heterodimeric complex with GABA-B receptor subunit 1, neither of which is effective on its own. Allelic variants of this gene have been associated with nicotine dependence.[provided by RefSeq, Jan 2010]
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]
Calculated Mw	106 kDa
Cellular Localization	Cell Junction, Cell membrane, postsynaptic cell membrane, Synapse

Images



ARG22242 anti-GABAB Receptor 2 antibody [S81-2] ICC/IF image

Immunofluorescence: Human Neuroblastoma cell line SK-N-BE. Fixation: 4% Formaldehyde for 15 min at RT. Primary antibody: ARG22242 anti-GABAB Receptor 2 antibody [S81-2] at 1:100 for 60 min at RT. Secondary antibody: Goat anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Primary antibody (D) Composite.



ARG22242 anti-GABAB Receptor 2 antibody [S81-2] WB image

Western blot: 10 µg of Rat Brain Membrane. Block: 5% milk. Primary antibody: ARG22242 anti-GABAB Receptor 2 antibody [S81-2] at 1:1000 for 1 hour at RT. Secondary antibody: Goat anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: TMB solution for 10 min at RT.