

Product datasheet for TA326530

OriGene Technologies, Inc.

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Gabbr1 Mouse Monoclonal Antibody [Clone ID: S93A-49]

Product data:

Product Type: Primary Antibodies

Clone Name: S93A-49

Applications: WB

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Fusion protein amino acids 873-977 (cytoplasmic C-terminus) of rat GABA(B)R1

Formulation: PBS pH7.4, 50% glycerol

Concentration: lot specific

Purification: Protein G Purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: gamma-aminobutyric acid type B receptor subunit 1

Database Link: NP 112290

Entrez Gene 2550 HumanEntrez Gene 54393 MouseEntrez Gene 81657 Rat

Q9Z0U4





Background:

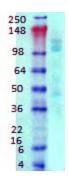
GABA (-aminobutyric acid) is the primary inhibitory neurotransmitter in the central nervous system and interacts with three different receptors: GABA(A), GABA(B) and GABA(C) receptor. The ionotropic GABA(A) and GABA(C) receptors are ligand-gated ion channels that produce fast inhibitory synaptic transmission. In contrast, the metabotropic GABA(B) receptor is coupled to G proteins that modulate slow inhibitory synaptic transmission . Functional GABA(B) receptors form heterodimers of GABA(B)R1 and GABA(B)R2 where GABA(B)R1 binds the ligand and GABA(B)R2 is the primary G protein contact site . Two isoforms of GABA(B)R1 have been cloned: GABA(B)R1a is a 130 kD protein and GABA(B)R1b is a 95 kD protein . G proteins subsequently inhibit adenyl cylase activity and modulate inositol phospholipid hydrolysis. GABA(B) receptors have both pre- and postsynaptic inhibitions: presynaptic GABA(B) receptors inhibit neurotransmitter release through suppression of high threshold calcium channels, while postsynaptic GABA(B) receptors inhibitthrough coupled activation of inwardly rectifying potassium channels. In addition to synaptic inhibition, GABA(B) receptors may also be involved in hippocampal long-term potentiation, slow wave sleep and muscle relaxation .

Synonyms: dJ271M21.1.1; dJ271M21.1.2; FLJ92613; GABA-B-R1; GABABR1; GABBR1-3; GB1; GPRC3A;

hGB1a; OTTHUMP00000109099

Note: Detects ~115kDa. No cross-reactivity against GABA(B)R2

Product images:



Western blot analysis of GABA(Beta)R1 in rat brain membrane tissues, using a 1:1000 dilution of the antibody