



Rabbit Anti-phospho-GABBR1 (Ser923) antibody

SL5358R

Product Name:	phospho-GABBR1 (Ser923)
Chinese Name:	磷酸化gamma氨基丁酸B型受体1抗体
Alias:	GABBR1 (phospho S1180); GABBR1 (phospho Ser1180); p-GABBR1 (Ser1180); GABA _B Receptor 1; dJ271M21.1.1; dJ271M21.1.2; FLJ92613; GABA _B R1; GABA _B R1; GABA _B R1; GABA _B subunit 1c; GABA _B (1e); GABA _B R1; GABA _B R1; GABA _B R1; GABBR 1; GABBR1 3; GABBR1; Gamma aminobutyric acid (GABA) B receptor 1; Gamma aminobutyric acid B receptor 1; Gamma aminobutyric acid type B receptor subunit 1; Gb 1; Gb1; GPRC 3A; GPRC3A; hGB1a; GABR1_HUMAN; Gamma-aminobutyric acid type B receptor subunit 1; GABA B Receptor 1; GABA-B receptor 1; GABA-B-R1; GABA-BR1; GABA _B R1; Gb1; Seven transmembrane helix receptor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Cellular localization:	The cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human GABBR1 around the phosphorylation site of Ser923:R(p-S)RR
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.

PubMed:[PubMed](#)

Gamma-aminobutyric acid (GABA) is the main inhibitory neurotransmitter in the mammalian central nervous system. GABA exerts its effects through ionotropic [GABA(A/C)] receptors, to produce fast synaptic inhibition, and metabotropic [GABA(B)] receptors, to produce slow, prolonged inhibitory signals. The GABA(B) receptor consists of a heterodimer of two related 7-transmembrane receptors, GABA(B) receptor 1 and GABA(B) receptor 2. The GABA(B) receptor 1 gene is mapped to chromosome 6p21.3 within the HLA class I region close to the HLA-F gene. Susceptibility loci for multiple sclerosis, epilepsy, and schizophrenia have also been mapped in this region. Alternative splicing of this gene generates multiple transcript variants. [provided by RefSeq, Jun 2009].

Function:

Receptor for GABA. The activity of this receptor is mediated by G-proteins that inhibit adenylyl cyclase activity, stimulates phospholipase A2, activates potassium channels, inactivates voltage-dependent calcium-channels and modulates inositol phospholipids hydrolysis. Plays a critical role in the fine-tuning of inhibitory synaptic transmission. Pre-synaptic GABA-B-R inhibit neurotransmitter release by down-regulating high-voltage activated calcium channels, whereas postsynaptic GABA-B-R decrease 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. Activated by (-)-baclofen, cgp27492 and blocked by phaclofen.

Isoform 1E function may be to regulate the availability of functional GABA-B-R1A/GABA-B-R2 heterodimers by competing for GABA-B-R2 dimerization. This could explain the observation that certain small molecule ligands exhibit differential affinity for central versus peripheral sites.

Subunit:

Heterodimer of GABA-B-R1 and GABA-B-R2. Neither of which is effective on its own and homodimeric assembly does not seem to happen. Isoform 1E (without C-terminal intracellular domain) is unable to dimerize via a coiled-coil interaction with GABA-B-R2. Interacts with the leucine zipper of the C-terminal bZIP domain of ATF4 via its C-terminal region. Interacts with JAKMIP1.

Subcellular Location:

Cell membrane; Multi-pass membrane protein. Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Note=Colocalizes with ATF4 in hippocampal neuron dendritic membranes (By similarity). Moreover coexpression of GABA-B-R1 and GABA-B-R2 appears to be a prerequisite for maturation and transport of GABA-B-R1 to the plasma membrane. Isoform 1E: Secreted (Probable).

Tissue Specificity:

Highly expressed in brain and weakly in heart, small intestine and uterus. Isoform 1A is mostly expressed in granular cell and molecular layer. Isoform 1B is mostly expressed

Product Detail:

in Purkinje cells. Isoform 1E is predominantly expressed in peripheral tissues as kidney, lung, trachea, colon, small intestine, stomach, bone marrow, thymus and mammary gland.

Similarity:

Belongs to the G-protein coupled receptor 3 family. GABA-B receptor subfamily. Contains 2 Sushi (CCP/SCR) domains.

SWISS:

Q9UBS5

Gene ID:

2550

Database links:

[Entrez Gene: 2550](#)Human

[Entrez Gene: 54393](#)Mouse

[Entrez Gene: 81657](#)Rat

[Omim: 603540](#)Human

[SwissProt: Q9UBS5](#)Human

[SwissProt: Q9WV18](#)Mouse

[SwissProt: Q9Z0U4](#)Rat

[Unigene: 167017](#)Human

[Unigene: 32191](#)Mouse

[Unigene: 30059](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

g-

氨基丁酸(GABA)是哺乳动物中枢神经系统中重要的抑制性神经递质, 在体内通过作用于离子通道型的GABAA、GABAC受体及代谢型的GABAB受体而发挥生理功能。

GABAB1受体存在于神经元的突触前及突触后部位, 介导慢的抑制性效应, 在脑内参与许多重要的生理活动和病理变化, 包括认知损害、癫痫、痉挛及药物成瘾等。GABAB受体属于G protein-coupled receptor家族的C家族, 具有七次跨膜结构, N-

端位于胞外, C-端位于胞内。

www.sunlongbiotech.com