abcam

Product datasheet

Recombinant Human GABA B Receptor 1 protein ab112287

1 图像

描述

产品名称 重组人GABA B Receptor 1蛋白

表达系统 Wheat germ Accession Q9UBS5-2

蛋白长度 Protein fragment

无动物成分 No

性质 Recombinant

种属 Human

序列 AVYIGALFPMSGGWPGQACQPAVEMALEDVNSRRDILPDYE

LKLIHHDS

KCDPGQATKYLYELLYNDPIKIILMPGCSSVSTLVAEAARMW

NLIVLSYG

预**测分子量** 37 kDa **氨基酸** 52 to 151

标签 GST tag N-Terminus

技术指标

Our Abpromise guarantee covers the use of ab112287 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应**用** SDS-PAGE

Western blot

ELISA

形式 Liquid

制备和贮存

稳定性和存储 Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

00.8 :Ha

Constituents: 0.31% Glutathione, 0.79% Tris HCI

Glutathione is reduced

常规信息

功能

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.

组织特异性

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 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.

序列相似性

Belongs to the G-protein coupled receptor 3 family. GABA-B receptor subfamily.

Contains 2 Sushi (CCP/SCR) domains.

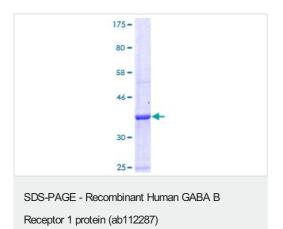
结构域

Alpha-helical parts of the C-terminal intracellular region mediate heterodimeric interaction with GABA-B receptor 2. The linker region between the transmembrane domain 3 (TM3) and the transmembrane domain 4 (TM4) probably play a role in the specificity for G-protein coupling.

细胞定位

Secreted and Cell membrane. Cell junction > synapse > postsynaptic cell membrane. 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.

图片



ab112287 analysed on a 12.5% SDS-PAGE stained with Coomassie Blue.

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