

## Product datasheet

# Recombinant Human GABA B Receptor 1 protein ab112287

画像数 1

### 製品の詳細

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製品名	Recombinant Human GABA B Receptor 1 protein
発現系	Wheat germ
アクセッション番号	<b>Q9UBS5-2</b>
タンパク質長	Protein fragment
Animal free	No
由来	Recombinant
生物種	Human
配列	AVYIGALFPMSGGWPGGQACQPAVEMALEDVNSRRDILPDYE LKLIHHDS KCDPGQATKYLVELLYNDPIKIILMPGCSSVSTLVAEAARMW NLIVLSYG
予測される分子量	37 kDa
領域	52 to 151
タグ	GST tag N-Terminus

### 特性

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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.

アプリケーション	SDS-PAGE Western blot ELISA
製品の状態	Liquid

### 前処理および保存

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保存方法および安定性	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl  Glutathione is reduced
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## 関連情報

### 機能

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.

### 組織特異性

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.

### 配列類似性

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

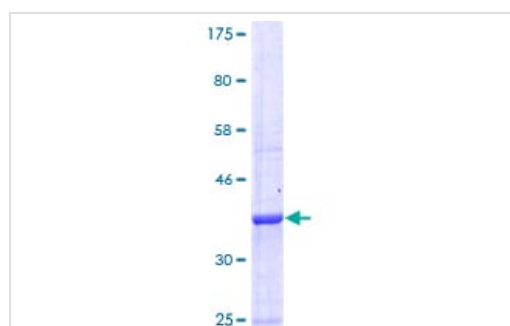
### ドメイン

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.

### 細胞内局在

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.

## 画像



SDS-PAGE - Recombinant Human GABA B  
Receptor 1 protein (ab112287)

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

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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