



Rabbit Anti-GABRA1/GABA A Receptor alpha 1 antibody

SL1232R

Product Name:	GABRA1/GABA A Receptor alpha 1
Chinese Name:	G1氨基丁酸A型受体 α 1抗体
Alias:	ECA4; EJM; EJM5; Gaba receptor alpha 1 polypeptide; GABA(A) receptor; GABA(A) receptor subunit alpha 1; GABA(A) receptor subunit alpha-1; GABA(A) receptor, alpha 1; GABRA 1; GABRA1; Gamma aminobutyric acid (GABA) A receptor alpha 1; Gamma aminobutyric acid A receptor alpha 1; Gamma aminobutyric acid receptor subunit alpha 1; Gamma-aminobutyric acid receptor subunit alpha-1; GBRA1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,
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.
Molecular weight:	52kDa
Cellular localization:	The cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GABRA1:301-450/456
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

This gene encodes a gamma-aminobutyric acid (GABA) receptor. GABA is the major inhibitory neurotransmitter in the mammalian brain where it acts at GABA-A receptors, which are ligand-gated chloride channels. Chloride conductance of these channels can be modulated by agents such as benzodiazepines that bind to the GABA-A receptor. GABA-A receptors are pentameric, consisting of proteins from several subunit classes: alpha, beta, gamma, delta and rho. Mutations in this gene cause juvenile myoclonic epilepsy and childhood absence epilepsy type 4. Multiple transcript variants encoding the same protein have been identified for this gene. [provided by RefSeq].

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.

Subcellular Location:

Secreted and Cell membrane.

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 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:

P14867

Gene ID:

2554

Database links:

[Entrez Gene: 2554](#) Human

Product Detail:

[Entrez Gene: 14394](#) Mouse

[Entrez Gene: 29705](#) Rat

[Omim: 137160](#) Human

[SwissProt: P19150](#) Chicken

[SwissProt: P08219](#) Cow

[SwissProt: P14867](#) Human

[SwissProt: P62812](#) Mouse

[SwissProt: P62813](#) Rat

[Unigene: 175934](#) Human

[Unigene: 439668](#) Mouse

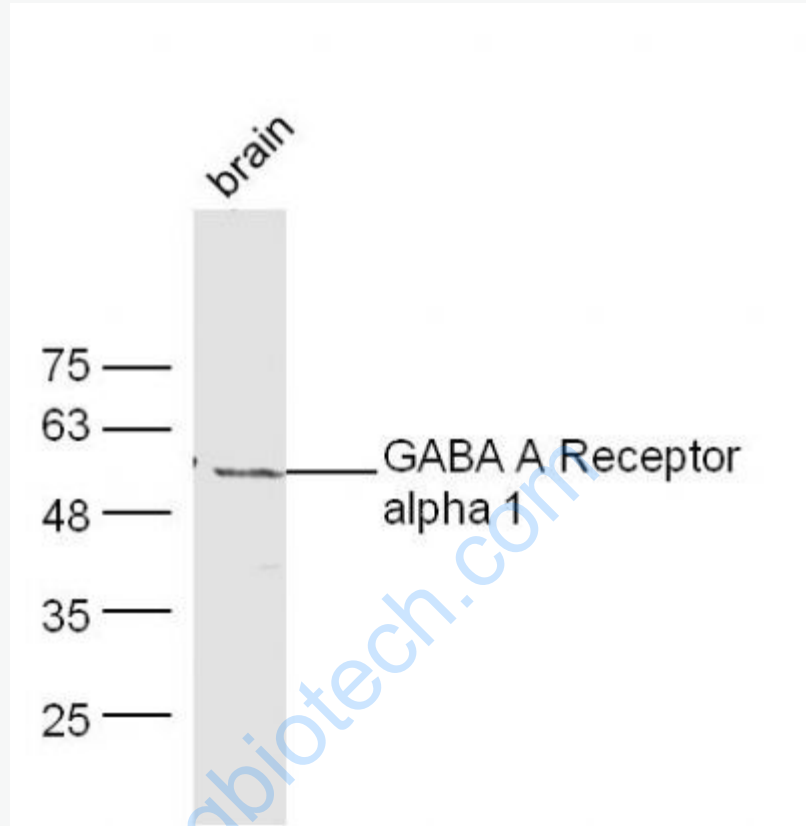
[Unigene: 28463](#) Rat

Important Note:

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

GABA是中枢神经系统主要的抑制性神经递质, 而GABA-AR α 1是GABA的受体之一,在脑内分布最普遍, α 1亚单位与其功能密切相关。通过位于脑内的GABA受体发挥抑制性作用GABA及GABA-AR α 1在癫痫、颅脑损伤、神经毒剂中毒等疾病、损伤和中毒模型中的表达、结合都有改变。

Picture:



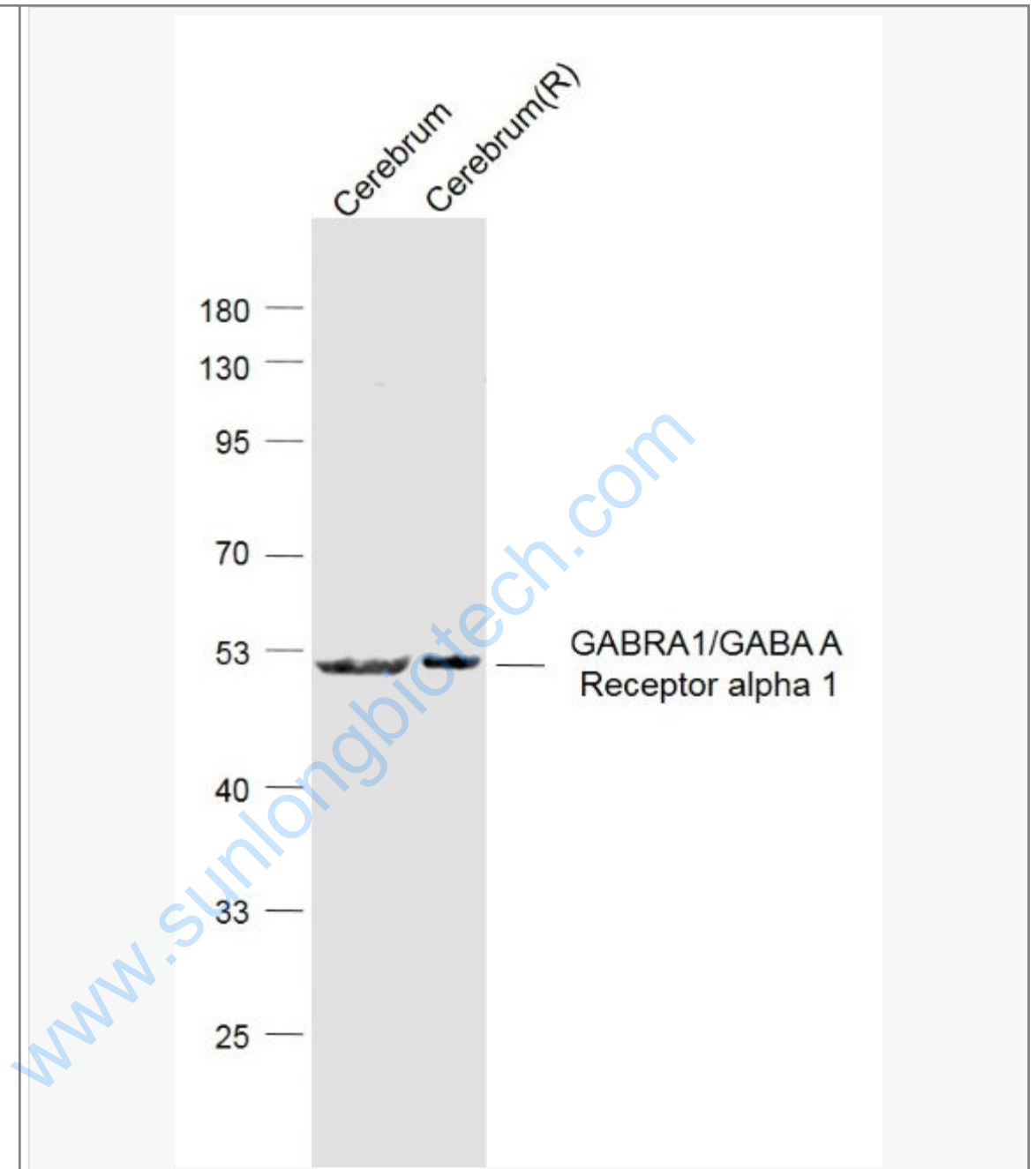
Sample: Brain (Mouse) Lysate at 40 ug

Primary: Anti-GABA A Receptor (SL1232R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 52 kD

Observed band size: 52 kD



Sample:

Cerebrum (Mouse) Lysate at 40 ug

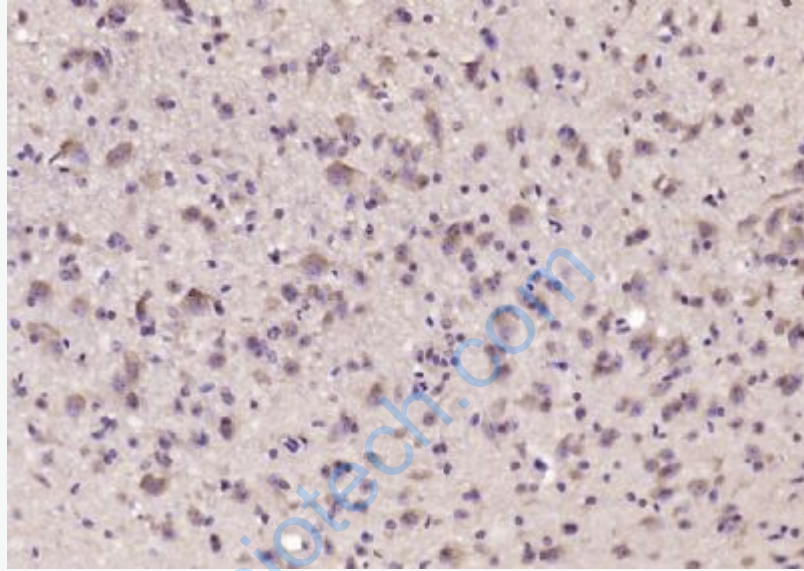
Cerebellum (Rat) Lysate at 40 ug

Primary: Anti-GABRA1/GABA A Receptor alpha 1 (SL1232R) at 1/1000 dilution

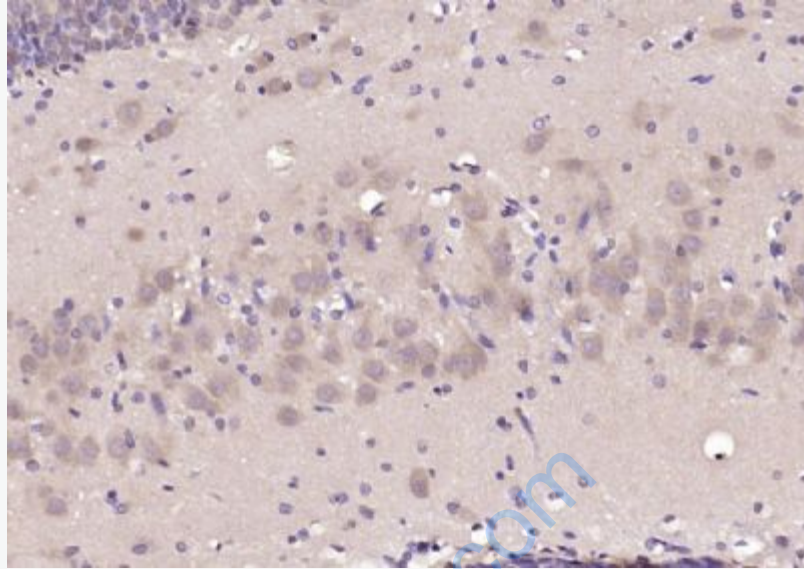
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 52 kD

Observed band size: 52 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GABRA1 GABA A Receptor alpha 1) Polyclonal Antibody, Unconjugated (SL1232R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GABRA1 GABA A Receptor alpha 1) Polyclonal Antibody, Unconjugated (SL1232R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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