



## Rabbit Anti-Ephexin-1 antibody

SL11458R

<b>Product Name:</b>	Ephexin-1
<b>Chinese Name:</b>	神经细胞鸟苷酸置换因子NGEF抗体
<b>Alias:</b>	ARHGEF27; Eph-interacting exchange protein; EPHEXIN; Ephexin 1; Neuronal guanine nucleotide exchange factor; Ngef; NGEF_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	82kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human EPHEXIN:451-550/710
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	EPHEXIN is a 710 amino acid protein that localizes to both the membrane and the cytoplasm and contains one SH3 domain, one PH domain and one DH domain. Expressed at high levels in brain and present at lower levels in lung tissue, EPHEXIN interacts with EphA4 and functions as a guanine nucleotide exchange factor (GEF) that is capable of activating Rho A, Rac 1 and Cdc42 and is thought to play a role in axon guidance and growth cone collapse. EPHEXIN is subject to Src-dependent

phosphorylation, an event that increases the GEF activity of EPHEXIN toward Rho A. Human EPHEXIN, which exists as multiple alternatively spliced isoforms, shares a high degree of sequence homology with its mouse counterpart, suggesting a conserved role between species.

**Function:**

Acts as a guanine nucleotide exchange factor (GEF) which differentially activates the GTPases RHOA, RAC1 and CDC42. Plays a role in axon guidance regulating ephrin-induced growth cone collapse. Upon activation by ephrin through EPHA4, the GEF activity switches toward RHOA resulting in its activation. Activated RHOA promotes cone retraction at the expense of RAC1-and CDC42-stimulated growth cone extension.

**Subunit:**

Interacts with CDK5R1 and EPHA4; activated by EPHA4 through the CDK5 kinase

**Subcellular Location:**

Cytoplasm. Membrane. Cell projection, growth cone. Associated with membranes. Localizes to axonal growth cones.

**Tissue Specificity:**

Highly expressed in brain specifically in caudate nucleus and to a lower extent in amygdala and hippocampus. Also detected in lung.

**Post-translational modifications:**

Src-dependent phosphorylation at Tyr-179 upon EPHA4 activation increases the guanine exchange factor activity toward RHOA.

**Similarity:**

Contains 1 DH (DBL-homology) domain.

Contains 1 PH domain.

Contains 1 SH3 domain.

**SWISS:**

Q8N5V2

**Gene ID:**

25791

**Database links:**

[Entrez Gene: 25791](#) Human

[Entrez Gene: 53972](#) Mouse

[Entrez Gene: 246217](#) Rat

[Entrez Gene: 424744](#) Chicken

[Omin: 605991](#) Human

[SwissProt: Q8N5V2](#) Human

[SwissProt: Q8CHT1](#) Mouse

[SwissProt: Q5BKC9](#) Rat

[Unigene: 97316](#) Human

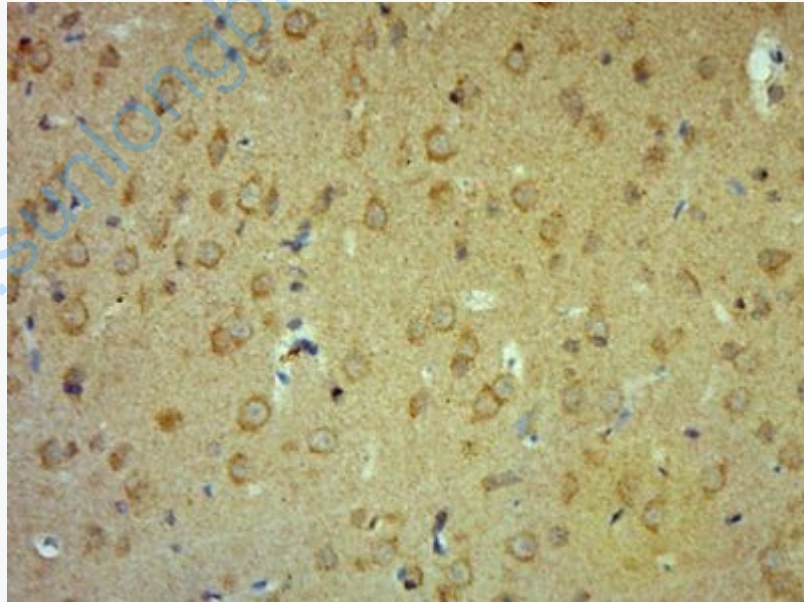
[Unigene: 435439](#) Mouse

[Unigene: 20670](#) Rat

**Important Note:**

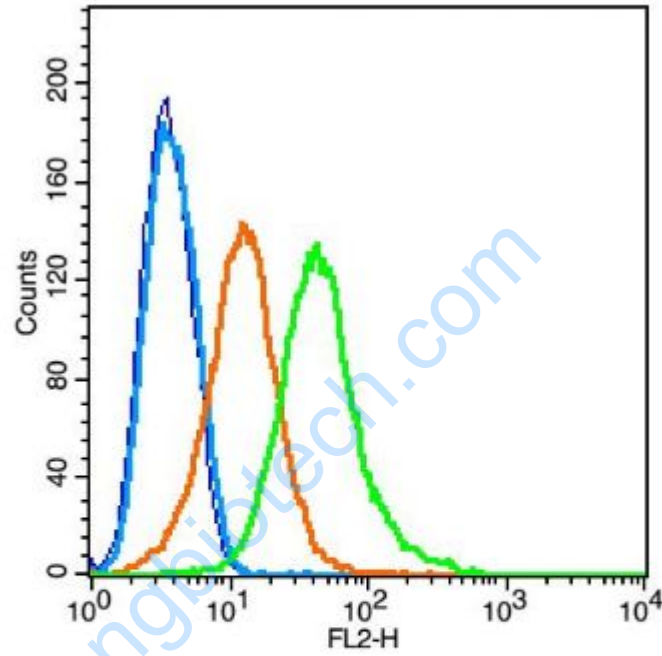
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**Picture:**



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 (Ephexin-1) Polyclonal Antibody,

Unconjugated (SL11458R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Key	Name	Parameter
—	-RSC96-blank.024	FL2-H
—	bs-0295G-PE(Ja. L.)-RSC96-1.025	FL2-H
—	bs-0295P(B)-(PE)(Ja.#1F1C22.038)	FL2-H
—	bs-11458R-(PE)(Ja. L#1F1C2C.043)	FL2-H

Positive control: RSC96

Isotype Control Antibody: Rabbit IgG ; Secondary Antibody: Goat anti-rabbit IgG-

FITC, Dilution: 1:100 in 1 X PBS containing 0.5% BSA ; Primary Antibody

Dilution: 6µl in 100 µL 1X PBS containing 0.5% BSA.