



Rabbit Anti-RIN1 antibody

SL6094R

Product Name:	RIN1
Chinese Name:	RAS互动/干扰蛋白1抗体
Alias:	Ras and Rab interactor 1; ras inhibitor 1; ras inhibitor; RIN1_HUMAN; Ras inhibitor JC99; ras inhibitor RIN1; Ras interaction/interference protein 1; RIN 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,
Applications:	ELISA=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.
Molecular weight:	84kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RIN1:201-300/783
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
Product Detail:	RIN1 is a Ras effector protein which can affect Ras signaling in a variety of ways. It enhances signaling from ABL1 and ABL2 whcih are involved in regulation of cytoskeletal remodeling. It may function as a guanine nucleotide exchange factor in activation of Rab5a. Rin1 also competes with RAF1 for binding of the activated form of Ras. It may play a role inhibiting the modulation of neuronal plasticity in formation of aversive memory, and has been implicated as a tumor supressor gene in breast cancer.

Function:

Ras effector protein, which may serve as an inhibitory modulator of neuronal plasticity in aversive memory formation. Can affect Ras signaling at different levels. First, by competing with RAF1 protein for binding to activated Ras. Second, by enhancing signaling from ABL1 and ABL2, which regulate cytoskeletal remodeling. Third, by activating RAB5A, possibly by functioning as a guanine nucleotide exchange factor (GEF) for RAB5A, by exchanging bound GDP for free GTP, and facilitating Ras-activated receptor endocytosis.

Subunit:

Interacts with the GTP-bound form of Ras proteins (NRAS, HRAS and KRAS). This interaction prevents the association between RAF1 and Ras. Interacts with 14-3-3 proteins YWHAB, YWHAE and YWHAZ when phosphorylated on Ser-351. Interacts with the SH3 domain of ABL1 and ABL2. Interacts with RAB5A. The interaction with Ras is probably regulated and antagonized by the interaction with 14-3-3 proteins. The interaction with 14-3-3 proteins is regulated by phosphorylation on Ser-351.

Subcellular Location:

Cytoplasm. Membrane. Cytoplasm, cytoskeleton. Note=Some amount is membrane-associated.

Tissue Specificity:

Expressed in all tissues examined with high levels in brain, placenta and pancreas.

Post-translational modifications:

Phosphorylated on tyrosine residues by ABL1 and ABL2. Phosphorylation at Ser-351 by PRKD1 induces interaction with 14-3-3 proteins.

Similarity:

Belongs to the RIN (Ras interaction/interference) family.

Contains 1 Ras-associating domain.

Contains 1 SH2 domain.

Contains 1 VPS9 domain.

SWISS:

Q13671

Gene ID:

9610

Database links:

[Entrez Gene: 9610](#)Human

[Entrez Gene: 225870](#)Mouse

[Entrez Gene: 207119](#)Rat

[Olim: 605965](#)Human

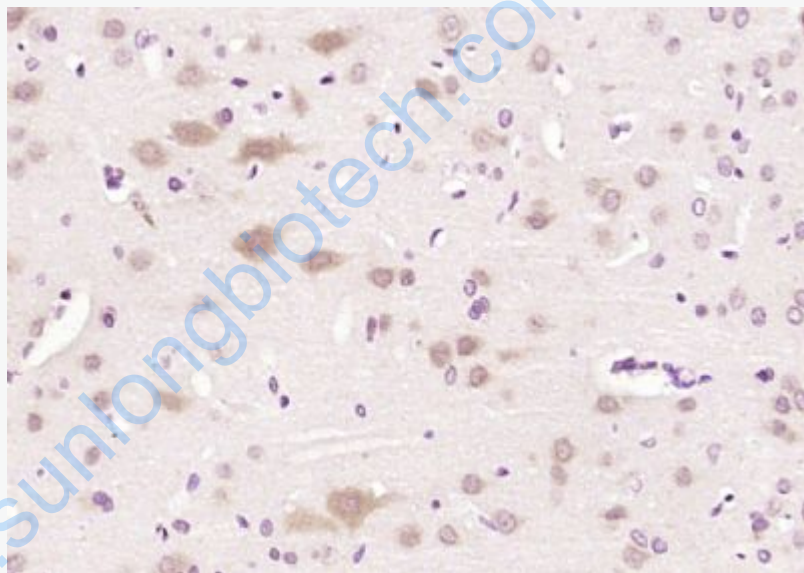
[SwissProt: Q13671](#)Human

[SwissProt: Q921Q7](#)Mouse

[SwissProt: P97680](#)Rat

Important Note:

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



Picture:

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 (RIN1) Polyclonal Antibody, Unconjugated (SL6094R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.