



Rabbit Anti-RIT1 antibody

SL8392R

Product Name:	RIT1
Chinese Name:	RIT1蛋白抗体
Alias:	GTP binding protein Roc1; GTP-binding protein Rit1; Ras like protein expressed in many tissues; Ras like without CAAX 1; Ras-like protein expressed in many tissues; Ras-like without CAAX protein 1; RIBB; Ric like expressed in many tissues; RIT; RIT1; RIT1 HUMAN; ROC1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	25kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RIT1:141-219/219
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:	Plays a crucial role in coupling NGF stimulation to the activation of both EPHB2 and MAPK14 signaling pathways and in NGF-dependent neuronal differentiation. Neuronal activity dramatically increases the concentration of cytosolic Ca ²⁺ , which then serves as a second messenger to direct diverse cellular responses. Calmodulin is a

primary mediator of Ca²⁺ signals in the nervous system. Ric, a protein related to the Ras subfamily of small GTPases, has the ability to bind calmodulin. In addition, two Ras-like human proteins, Rin and Rit (Ric-related gene expressed in many tissues), which are 71% and 66% identical to RIC respectively, share related G2 domains with Ric. While most members of the Ras subfamily are plasma membrane-associated and generally require a C-terminal isoprenyl group to bind to the plasma membrane, Rit and Rin lack the recognition signal for C-terminal prenylation. Transiently expressed Rit and Rin are plasma membrane-localized because both proteins contain a C-terminal cluster of basic amino acids, which provides a mechanism for membrane association. Rin binds calmodulin through a C-terminal binding motif. Rit and Ric are widely expressed, whereas expression of Rin is restricted to the neuron system. In conclusion, Rit and Rin define a novel subfamily of Ras-related proteins

Function:

Plays a crucial role in coupling NGF stimulation to the activation of both EPHB2 and MAPK14 signaling pathways and in NGF-dependent neuronal differentiation.

Subunit:

Interacts with MLLT4, the C-terminal domain of RALGDS and RLF, but not with RIN1 and PIK3CA. RLF binds exclusively to the active GTP-bound form. Strongly interacts with BRAF, but only weakly with RAF1. BARF and RAF1 association is dependent upon the GTP-bound state. Interacts with RGL3 (By similarity).

Subcellular Location:

Cell membrane.

Tissue Specificity:

Expressed in many tissues.

Similarity:

Belongs to the small GTPase superfamily. Ras family.

SWISS:

Q92963

Gene ID:

6016

Database links:

[Entrez Gene: 6016](#)Human

[Entrez Gene: 19769](#)Mouse

[Entrez Gene: 499652](#)Rat

[Omim: 609591](#)Human

[SwissProt: Q92963](#)Human

[SwissProt: P70426](#)Mouse

[Unigene: 491234](#)Human

[Unigene: 4009](#)Mouse

[Unigene: 50417](#)Rat

Important Note:

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

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