



## Rabbit Anti-RIC8A antibody

SL11355R

<b>Product Name:</b>	RIC8A
<b>Chinese Name:</b>	胆碱酯酶抑制剂8抗体
<b>Alias:</b>	Protein Ric-8A; resistance to inhibitors of cholinesterase 8 homolog A (C. elegans); RIC8; RIC8A; RIC8A_HUMAN; synembryn; Synembryn-A; MGC104517; MGC131931; MGC148073; MGC148074.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
<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>	59kDa
<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 RIC8A:301-400/531
<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 癆 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癆. 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 癆.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	The Ras superfamily of GTPases can be subdivided into the Ras, Rho/Rac, Sar, Rab, Arf, Rap and Ran subfamilies, all of which control multiple aspects of cell function, including cytoskeletal rearrangement, nuclear signaling and cell growth. The Ras superfamily of GTPases function as regulated switches that toggle between a

biologically active GTP-bound and an inactive GDP-bound form. This activation is catalyzed by guanine nucleotide exchange factors (GEFs). RIC-8A (resistance to inhibitors of cholinesterase 8 homolog A), also known as RIC8 or Synembryn-A, is a 530 amino acid cytoplasmic protein that can activate several G-alpha proteins, including G $\beta$ i-1, G $\beta$ q and G $\beta$ o. Functioning as a guanine nucleotide exchange factor, RIC-8A binds to GDP-associated substrates and exchanges bound GDP for free GTP. Via its ability to stimulate protein function, RIC-8A plays a role in regulating mitotic movement and may be involved in receptor-mediated ERK activation. RIC-8A is expressed as three isoforms due to alternative splicing events.

**Function:**

Guanine nucleotide exchange factor (GEF), which can activate some, but not all, G-alpha proteins. Able to activate GNAI1, GNAO1 and GNAQ, but not GNAS by exchanging bound GDP for free GTP. Involved in regulation of microtubule pulling forces during mitotic movement of chromosomes by stimulating G(i)-alpha protein, possibly leading to release G(i)-alpha-GTP and NuMA proteins from the NuMA-GPSM2-G(i)-alpha-GDP complex (By similarity). Also acts as an activator for G(q)-alpha (GNAQ) protein by enhancing the G(q)-coupled receptor-mediated ERK activation.

**Subunit:**

Interacts with GDP-bound G alpha proteins GNAI1, GNAO1 and GNAQ, and with GNA13 with lower affinity. Does not interact with G-alpha proteins when they are in complex with subunits beta and gamma. Interacts (via C-terminus) with RGS14; the interaction stimulates the dissociation of the complex between RGS14 and the active GTP-bound form of GNAI1 (By similarity).

**Subcellular Location:**

Cytoplasm. Cell membrane. Colocalizes with RIC8A in CA2 hippocampal neurons. Colocalizes with GNAI1 and RGS14 at the plasma membrane.

**Post-translational modifications:**

Phosphorylated upon DNA damage, probably by ATM or ATR.

**Similarity:**

Belongs to the synembryn family.

**SWISS:**

Q9NPQ8

**Gene ID:**

60626

**Database links:**

[Entrez Gene: 60626](#)Human

[Oimim: 609146](#)Human

[SwissProt: Q9NPQ8](#)Human

[Unigene: 592292](#)Human

**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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