10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RIC8A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17108c

Product Information

Application	WB, E
Primary Accession	Q9NPQ8
Other Accession	Q4R720, NP_068751.4
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37066
Calculated MW	59710
Antigen Region	244-272

Additional Information

Gene ID	60626
Other Names	Synembryn-A, Protein Ric-8A, RIC8A
Target/Specificity	This RIC8A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 244-272 amino acids from the Central region of human RIC8A.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RIC8A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RIC8A {ECO:0000303|PubMed:25074811, ECO:0000312|HGNC:HGNC:29550}
Function	Chaperone that specifically binds and folds nascent G alpha proteins prior to G protein heterotrimer formation, promoting their stability and activity: folds GNAI1, GNAO1, GNA13 and GNAQ (By similarity). Does not fold G(s)

	G-alpha proteins GNAS nor GNAL (By similarity). Also acts as a guanine nucleotide exchange factor (GEF) for G alpha proteins by stimulating exchange of bound GDP for free GTP (By similarity). Involved in regulation of microtubule pulling forces during mitotic movement of chromosomes by stimulating G(i)-alpha protein (GNAI1), 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 (PubMed:16629901).
Cellular Location	Cytoplasm, cell cortex {ECO:0000250|UniProtKB:Q80ZG1}. Cytoplasm {ECO:0000250|UniProtKB:Q80ZG1}

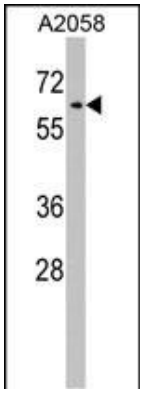
Background

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.

References

Woodard, G.E., et al. Mol. Cell. Biol. 30(14):3519-3530(2010)
Matsuoka, S., et al. Science 316(5828):1160-1166(2007)
Lim, J., et al. Cell 125(4):801-814(2006)
Nishimura, A., et al. Genes Cells 11(5):487-498(2006)
Tall, G.G., et al. J. Biol. Chem. 278(10):8356-8362(2003)

Images



RIC8A Antibody (Center) (Cat. #AP17108c) western blot analysis in A2058 cell line lysates (35ug/lane).This demonstrates the RIC8A antibody detected the RIC8A protein (arrow).