

RIC8A Recombinant Mouse mAb

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Catalog # AP94231

Product Information

Application	WB
Reactivity	Human
Host	Mouse
Clonality	Recombinant
Physical State	Liquid
Isotype	IgG1, Kappa
Purity	affinity purified by Protein G
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Cell membrane. Colocalizes with RIC8A in CA2 hippocampal neurons. Colocalizes with GNAI1 and RGS14 at the plasma membrane.
SIMILARITY	Belongs to the synembryn family.
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).
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 Gαi-1, Gαq and Gαo. 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.

Additional Information

Dilution	WB=1:500-1000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.