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GTP binding protein REM1 Rabbit pAb

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Catalog # AP58669

Product Information

Application	WB
Primary Accession	O75628
Reactivity	Mouse
Predicted	Rat, Dog, Human, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	32947
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human REM/GTP binding protein REM1
Epitope Specificity	221-298/298
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	REM (Rad and Gem related GTP binding protein) is a member of the Rad/Gem/Kir subfamily of Ras-like GTPases and shares with other members of this subfamily some unusual structural features. Among these are nonconservative amino acid substitutions within guanine nucleotide binding and hydrolysis domains, unique effector domains, extended N- and C-termini, and a conserved C-terminal sequence thought to mediate membrane association but lacking a classical isoprenylation motif. REM, with a predicted molecular weight of 32.9 kDa, is most highly expressed in cardiac muscle and is expressed at more moderate levels in lung, kidney and skeletal muscle. REM is phosphorylated in vivo and has been shown to interact with several 14-3-3 isoforms. It has been reported that the GTP-bound form of a related Ras-like GTPase, GEM/kir, inhibits high-voltage activated Ca2+ channel activities by interacting directly with the ?subunit. The reduced channel activities are the result of a decreased a-subunit expression at the plasma membrane. This inhibition of L-type Ca2+ channels prevents Ca2+-triggered exocytosis in hormone-secreting cells. There are data that suggest that REM similarly regulates Ca2+ channel expression.

Additional Information

Gene ID	28954
Other Names	GTP-binding protein REM 1, GTPase-regulating endothelial cell sprouting, Rad and Gem-like GTP-binding protein 1, REM1, GES, REM

Dilution	WB=1:500-2000
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.

Protein Information

Name	REM1
Synonyms	GES, REM
Function	Promotes endothelial cell sprouting and actin cytoskeletal reorganization. May be involved in angiogenesis. May function in Ca(2+) signaling.
Tissue Location	Most highly expressed in the endothelial lining of the blood vessels in uterus and heart. Lower levels found in spleen, lymph node, kidney and testis. Also found in cells with secretory function such as the islets of Langerhans, lobule/duct epithelium in the breast, bile duct epithelium in the liver, surface epithelium in the endometrial glands of the uterus, colon mucosa and acinar cells in the pancreas and the prostate

Background

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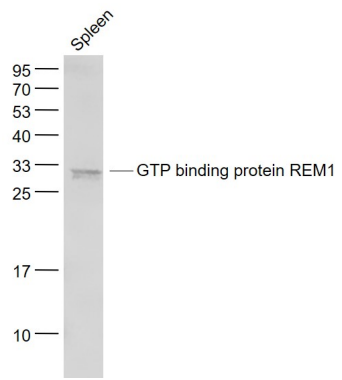
Images



Sample:
Spleen (Mouse) Lysate at 40 ug
Primary: Anti- GTP binding protein REM1 (AP58669) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 33 kD
Observed band size: 32 kD