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GTP binding protein REM1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58669

Specification

GTP binding protein REM1 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	O75628
Reactivity	**Rat, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**33 KDa**
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.**
SIMILARITY	**Belongs to the small GTPase superfamily. RGK family.**
SUBUNIT	**In vitro, interacts with calmodulin in a calcium-dependent manner.**
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.

GTP binding protein REM1 Polyclonal Antibody - 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

Target/Specificity
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.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

GTP binding protein REM1 Polyclonal Antibody - 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

GTP binding protein REM1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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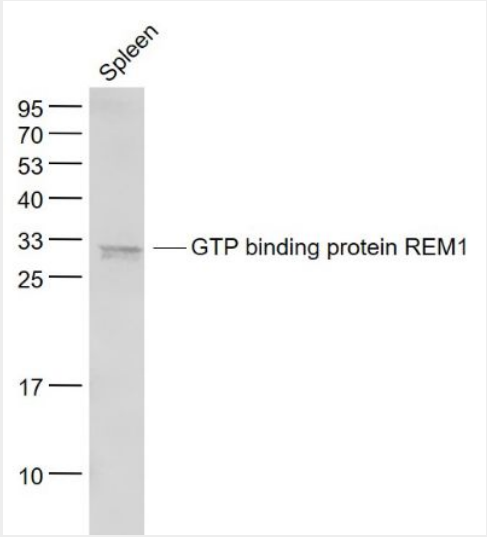
GTP binding protein REM1 Polyclonal Antibody - Images



Sample:
Spleen (Mouse) Lysate at 40 ug
Primary: Anti- GTP binding protein REM1 (bs-7502R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 33 kD
Observed band size: 32 kD