



Rabbit Anti-GTP binding protein REM1 antibody

SL7502R

Product Name:	GTP binding protein REM1
Chinese Name:	GTPBinding proteinREM1抗体
Alias:	Rad and Gem related GTP binding protein; GES; GTP binding protein REM; GTP binding protein REM 1; GTP binding protein REM1; GTPase GES; GTPase regulating endothelial cell sprouting; Rad and Gem like GTP binding protein 1; RAS (RAD and GEM) like GTP binding; RAS like GTP binding; RAS like GTP binding protein REM; REM 1; REM1; E030011C07Rik; RP23-35I8.9; GD:REM; MGC114556; MGC48669; OTTMUSP00000016855; REM1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	33kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human REM/GTP binding protein REM1:221-298/298
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed

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 α -subunit. The reduced channel activities are the result of a decreased α -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.

Function:

Promotes endothelial cell sprouting and actin cytoskeletal reorganization. May be involved in angiogenesis. May function in Ca²⁺ signaling.

Subunit:

In vitro, interacts with calmodulin in a calcium-dependent manner.

Tissue 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.

Similarity:

Belongs to the small GTPase superfamily. RGK family.

SWISS:

O75628

Gene ID:

28954

Database links:

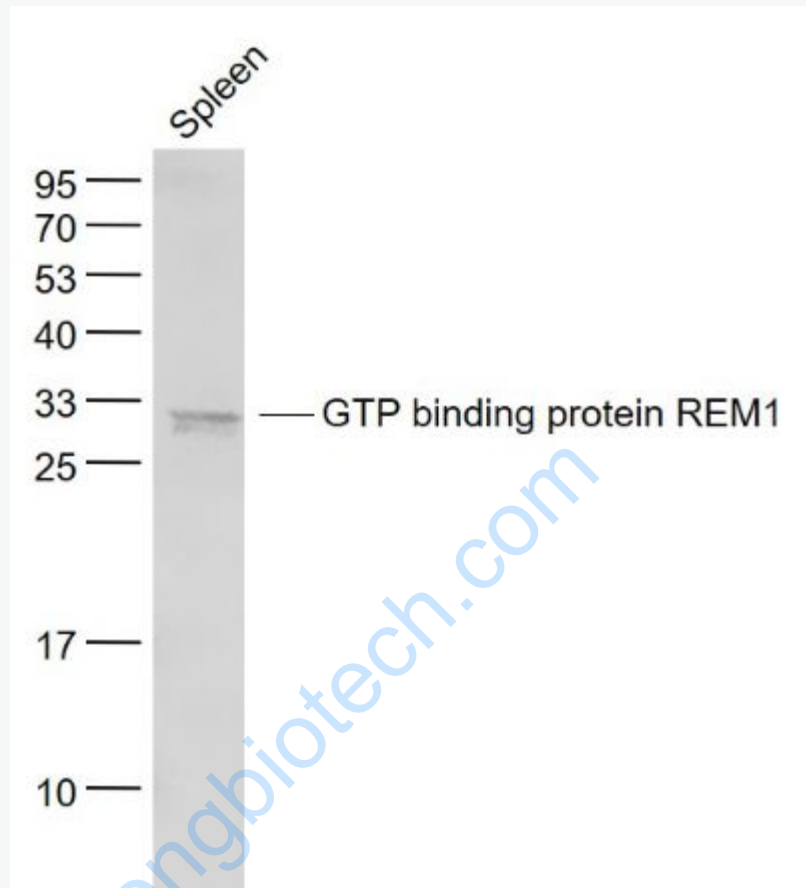
UniProtKB/Swiss-Prot: O75628.2

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Product Detail:

Picture:



Sample:

Spleen (Mouse) Lysate at 40 ug

Primary: Anti- GTP binding protein REM1 (SL7502R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 33 kD

Observed band size: 32 kD