产品名称：Rac GAP1 Rabbit Polyclonal Antibody
产品货号：APRab16821

产品概述（Summary）

产品名称（Production Name）	Rac GAP1 Rabbit Polyclonal Antibody
描述（Description）	Rabbit polyclonal Antibody
宿主（Host）	Rabbit
应用（Application）	WB,IHC,ICC/IF,ELISA
种属反应性（Reactivity）	Human,Mouse,Rat,Monkey

产品性能（Performance）

偶联物（Conjugation）	Unconjugated
修饰（Modification）	Unmodified
同种型（Isotype）	IgG
克隆（Clonality）	Polyclonal
形式（Form）	Liquid
存放说明（Storage）	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液（Buffer）	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式（Purification）	Affinity purification

免疫原信息（Immunogen）

基因名（Gene Name）	RACGAP1
别名（Alternative Names）	RACGAP1; KIAA1478; MGCRACGAP; Rac GTPase-activating protein 1; Male germ cell RacGap; MgcRacGAP; Protein CYK4 homolg; CYK4; HsCYK-4
基因 ID（Gene ID）	29127.0
蛋白 ID（SwissProt ID）	Q9H0H5.The antiserum was produced against synthesized peptide derived from human GTPase Activating Protein. AA range:353-402

产品应用（Application）

稀释比（Dilution Ratio）	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:20000-1:40000
蛋白分子量（Molecular Weight）	72kDa

产品名称：Rac GAP1 Rabbit Polyclonal Antibody
产品货号：APRab16821

研究背景（Background）

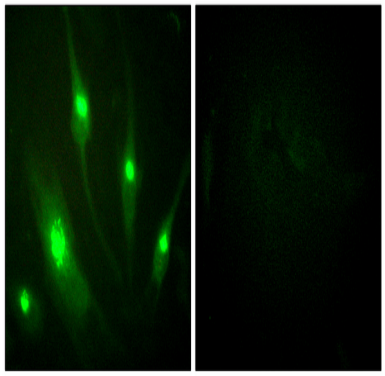
This gene encodes a GTPase-activating protein (GAP) that is a compoment of the centralspindlin complex. This protein binds activated forms of Rho GTPases and stimulates GTP hydrolysis, which results in negative regulation of Rho-mediated signals. This protein plays a regulatory role in cytokinesis, cell growth, and differentiation. Alternatively spliced transcript variants have been found for this gene. There is a pseudogene for this gene on chromosome 12. [provided by RefSeq, Feb 2016],domain:The coiled coil region is indispensible for localization to the midbody during cytokinesis.,function:Essential for the early stages of embryogenesis and may play a role in the microtubule-dependent steps in cytokinesis. Plays key roles in controlling cell growth and differentiation of hematopoietic cells through mechanisms other than regulating Rac GTPase activity. Also involved in the regulation of growth-related processes in adipocytes and myoblasts. May be involved in regulating spermatogenesis and in the RACGAP1 pathway in neuronal proliferation. Shows strong GAP (GTPase activation) activity towards CDC42 and RAC1 and less towards RHOA. Required for initiation of cleavage furrow ingression by regulating ECT2 and for assembly of the contractile ring. May play a role in regulating cortical activity through RHOA during cytokinesis. May participate in the regulation of sulfate transport in male germ cells.,induction:Expression is down-regulated during macrophage differention of HL-60 cells.,PTM:Phosphorylated at multiple sites in the midbody during cytokinesis. Phosphorylation by AURKB on SER-387 at the midbody is, at least in part, responsible for exerting its latent GAP activity towards RhoA.,similarity:Contains 1 phorbol-ester/DAG-type zinc finger.,similarity:Contains 1 Rho-GAP domain.,subcellular location:During interphase, localized to the nucleus and cytoplasm along with microtubules, in anaphase, is redistributed to the central spindle and, in telophase and cytokinesis, to the midbody. Colocalizes with RHOA at the contractile ring during cytokinesis. Colocalizes with RND2 in Golgi-derived proacrosomal vesicles and the acrosome.,subunit:Associates with alpha-, beta- and gamma-tubulin and microtubules. Interacts via its Rho-GAP domain with RND2. Associates with AURKB during M phase. Interacts via its Rho-GAP domain and basic region with PRC1. The interaction with PRC1 inhibits its GAP activity towards CDC42 in vitro, which may be required for maintaining normal spindle morphology. Associates with ECT2 at anaphase and during cytokinesis. Interacts with SLC26A8 via its N-terminus.,tissue specificity:Highly expressed in testis, thymus and placenta. Expressed at lower levels in spleen and peripheral blood lymphocytes. In testis, expression is restricted to germ cells with the highest levels of expression found in spermatocytes. Expression is regulated in a cell cycle-dependent manner and peaks during G2/M phase.,

研究领域（Research Area）

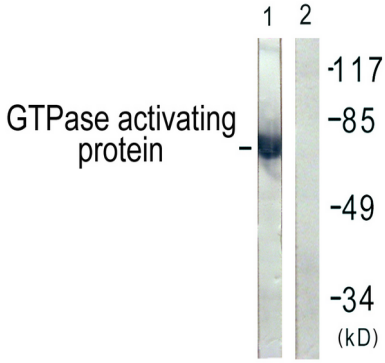
Cell Biology; Cell Cycle; Cell Division; Cytokinesis; Signal Transduction; Signaling Pathway; G Protein Signaling; Small G Proteins; Regulators

图片（Image Data）

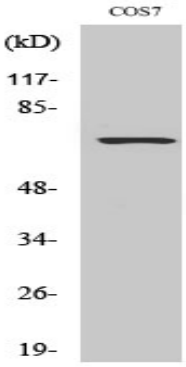
产品名称：Rac GAP1 Rabbit Polyclonal Antibody
产品货号：APRab16821



Immunofluorescence analysis of HeLa cells, using GTPase Activating Protein Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COS7 cells, using GTPase Activating Protein Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Rac GAP1 Polyclonal Antibody

注意事项（Note）

For research use only .