

RAP1GDS1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP11945c

Specification

RAP1GDS1 Antibody (Center) Blocking peptide - Product Information

Primary Accession [P52306](#)

RAP1GDS1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 5910

Other Names

Rap1 GTPase-GDP dissociation stimulator 1, Exchange factor smgGDS, SMG GDS protein, SMG P21 stimulatory GDP/GTP exchange protein, RAP1GDS1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RAP1GDS1 Antibody (Center) Blocking peptide - Protein Information

Name RAP1GDS1 {ECO:0000303|Ref.3}

Synonyms SMGGDS {ECO:0000303|Ref.3}

Function

Acts as a GEF (guanine nucleotide exchange factor) for the Rho family of small GTP-binding proteins (G guanins) that stimulates the dissociation of GDP to enable subsequent binding of GTP (PubMed:28630045, PubMed:30190425, PubMed:1549351, PubMed:11948427, PubMed:20709748). Additionally, appears to chaperone the processing and/or trafficking of small GTPases containing a C-terminal polybasic region independently of GEF activity (PubMed:20709748, PubMed:21242305). Targets include RAP1A/RAP1B, RHOA, RHOB, RHOC, RAC1 and KRAS (PubMed:1549351, PubMed:11948427, PubMed:20709748, PubMed:20709748, PubMed:20709748).

href="http://www.uniprot.org/citations/24415755" target="_blank">24415755). Regulates mitochondrial dynamics by controlling RHOT function to promote mitochondrial fission during high calcium conditions (PubMed:27716788). Able to promote the Ca(2+) release from the endoplasmic reticulum via both inositol trisphosphate (Ins3P) and ryanodine sensitive receptors leading to a enhanced mitochondrial Ca(2+) uptake (PubMed:24349085).

Cellular Location

Cytoplasm, cytosol. Endoplasmic reticulum. Mitochondrion. Nucleus Note=Nuclear import is dependent on complexing with a GTPase containing a C-terminal polybasic region.

RAP1GDS1 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

RAP1GDS1 Antibody (Center) Blocking peptide - Images**RAP1GDS1 Antibody (Center) Blocking peptide - Background**

The smg GDP dissociation stimulator (smgGDS) protein is astimulatory GDP/GTP exchange protein with GTPase activity (Riess et al., 1993 [PubMed 8262526]).

RAP1GDS1 Antibody (Center) Blocking peptide - References

Schönherr, C., et al. Oncogene 29(19):2817-2830(2010)Branham, M.T., et al. J. Biol. Chem. 284(37):24825-24839(2009)Zemunik, T., et al. Croat. Med. J. 50(1):23-33(2009)Tew, G.W., et al. J. Biol. Chem. 283(2):963-976(2008)Tiwari, S., et al. Blood 103(7):2661-2667(2004)