

RAP1GDS1 (12): sc-293052

BACKGROUND

RAP1GDS1 (RAP1, GTP-GDP dissociation stimulator 1), also known as GDS1 or SmgGDS, is a 607 amino acid protein that contains five ARM repeats and functions to stimulate the GDP/GTP exchange reaction of select small GTP-binding proteins. Additionally, RAP1GDS1 is thought to promote aberrant cell growth, playing a role in the development and metastasis of non-small cell lung carcinoma. Multiple isoforms of RAP1GDS1 exist due to alternative splicing events. The gene encoding RAP1GDS1 maps to human chromosome 4, which houses nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RAP1GDS1 (human) mapping to 4q23; Rap1gds1 (mouse) mapping to 3 H1.

RESEARCH USE

For research use only, not for use in diagnostic procedures. Not for resale.

SOURCE

RAP1GDS1 (12) is a mouse monoclonal antibody raised against amino acids 459-558 of RAP1GDS1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RAP1GDS1 (12) is recommended for detection of RAP1GDS1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for RAP1GDS1 siRNA (h): sc-88897, RAP1GDS1 siRNA (m): sc-106481, RAP1GDS1 shRNA Plasmid (h): sc-88897-SH, RAP1GDS1 shRNA Plasmid (m): sc-106481-SH, RAP1GDS1 shRNA (h) Lentiviral Particles: sc-88897-V and RAP1GDS1 shRNA (m) Lentiviral Particles: sc-106481-V.

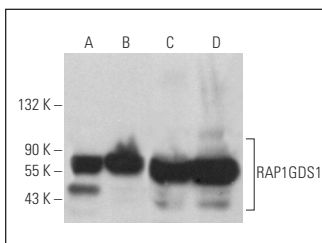
Molecular Weight of RAP1GDS1 isoforms: 57/61 kDa.

Positive Controls: rat brain extract: sc-2392, Jurkat whole cell lysate: sc-2204 or CCRF-CEM cell lysate: sc-2225.

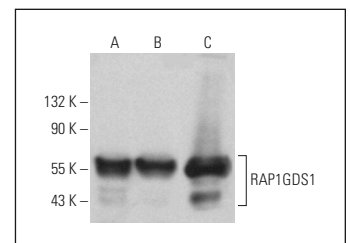
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



RAP1GDS1 (12): sc-293052. Western blot analysis of RAP1GDS1 expression in T98G (A), SK-BR-3 (B) and MOLT-4 (C) whole cell lysates and human brain tissue extract (D).



RAP1GDS1 (12): sc-293052. Western blot analysis of RAP1GDS1 expression in Jurkat (A) and CCRF-CEM (B) whole cell lysates and rat brain tissue extract (C).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.