BACKGROUND

Ral GDS (Ral guanine nucleotide dissociation stimulator) is a guanine nucleotide exchange factor (GEF) that activates Ral and is implicated in oncogenic Ras-induced cell transformation. RGL1 (Ral guanine nucleotide dissociation stimulator-like 1), also known as RGL or RalGDS-like 1, is a 768 amino acid protein that is a putative GEF. Strongly expressed in brain, heart, spleen, kidney and testis, RGL1 is a downstream effector protein that is involved in Ras and Ral signaling pathways. RGL1 contains an N-terminal Ras-GEF domain and a C-terminal Ras-interacting domain that interact with the GTP-bound form of Ras through its effector loop. Due to its similarity to RalGDS, RGL1 may be implicated in carcinogenesis. Two isoforms exist due to alternative splicing events.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: RGL1 (human) mapping to 1q25.3; Rgl1 (mouse) mapping to 1 G3.

SOURCE

RGL1 (43-Q5) is a mouse monoclonal antibody raised against recombinant RGL1 of human origin.

PRODUCT

Each vial contains 100 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RGL1 (43-Q5) is recommended for detection of RGL1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RGL1 siRNA (h): sc-62936, RGL1 siRNA (m): sc-62937, RGL1 shRNA Plasmid (h): sc-62936-SH, RGL1 shRNA Plasmid (m): sc-62937-SH, RGL1 shRNA (h) Lentiviral Particles: sc-62936-V and RGL1 shRNA (m) Lentiviral Particles: sc-62937-V.

Molecular Weight of RGL1: 87 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:


DATA

RGL1 (43-Q5): sc-81929. Western blot analysis of RGL1 expression in A-431 whole cell lysate.

DRAWING

RGL1 (43-Q5): sc-81929. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic localization.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our website at www.scbt.com for detailed protocols and support products.