

SgK223 (O67): sc-130491

BACKGROUND

The Ras p21 family of guanine nucleotide proteins has been widely studied in view of its role in signal transduction pathways and high frequency of mutations in human malignancies. The founding members of the Ras family (H-, K- and N-Ras p21) are members of a much larger superfamily of related proteins. Six members of this family, Rap 1A, Rap 1B, Rap 2, R-Ras, Ral A and Ral B, exhibit approximately 50% amino acid homology to Ras. The mammalian Rho proteins (Rho A, B, C, 6, 7 and 8) are approximately 30% homologous to Ras and are expressed in a wide range of cell types. Three Rho-related GTPases Rnd1 (Rho 6), Rnd2 (Rho 7) and Rnd3 (Rho 8 or Rho E) form a distinct branch of the Rho family since they differ from other Rho proteins in size, charge and biochemical properties. Rnd proteins are likely to be farnesylated, and appear to be constitutively in the activated GTP-bound form. Rnd proteins act as negative regulators of Actin assembly and of cell adhesion. Rnd2 binds to SgK223 (sugen kinase 223) in a GTP-dependent manner. Rnd2-bound SgK223 stimulates Rho A activity and induces cell contraction to regulate neurite outgrowth.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PRAGMIN (human) mapping to 8p23.1.

SOURCE

SgK223 (O67) is a mouse monoclonal antibody raised against recombinant Pragmin of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SgK223 (O67) is recommended for detection of SgK223 of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

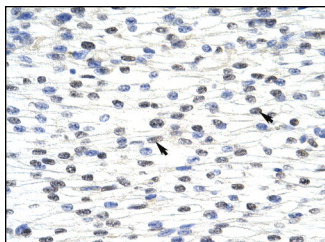
Suitable for use as control antibody for SgK223 siRNA (h): sc-77433, SgK223 shRNA Plasmid (h): sc-77433-SH and SgK223 shRNA (h) Lentiviral Particles: sc-77433-V.

Molecular Weight of SgK223: 175 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SgK223 (O67): sc-130491. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human adrenal gland 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 web site at www.scbt.com for detailed protocols and support products.