**BACKGROUND**

RCK, also known as DDX6 and P54, is a member of the DEAD-box RNA helicase family of proteins, all of which share common protein motifs. Found in most tissues, RCK is an unwinder that exhibits ATP-dependent RNA unwinding activity, as well as the ability to decay RNA in the 5'-3' direction. In non-malignant cells, RCK is associated with all processes of normal RNA metabolism including splicing, export and translation initiation. Mutations in the gene encoding RCK can cause the protein to be overexpressed, changing its function to that of an oncogene that positively regulates the expression of genes involved in cell growth and proliferation. It is believed that, through its unwindase activity, the main function of RCK is to downregulate mRNA expression and maintain normal transcriptional levels within the cell.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: DDX6 (human) mapping to 11q23.3; Ddx6 (mouse) mapping to 9 A5.2.

**SOURCE**

RCK (G-12) is a mouse monoclonal antibody raised against amino acids 61-170 mapping near the N-terminus of RCK of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-166489 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

RCK (G-12) is recommended for detection of RCK of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RCK siRNA (h): sc-72246, RCK siRNA (m): sc-72247, RCK shRNA Plasmid (h): sc-72246-SH, RCK shRNA Plasmid (m): sc-72247-SH, RCK shRNA (h) Lentiviral Particles: sc-72246-V and RCK shRNA (m) Lentiviral Particles: sc-72247-V.

Molecular Weight of RCK: 54 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, IB4 whole cell lysate: sc-364780 or RCK (h): 293T Lysate: sc-117056.

**RECOMMENDED SUPPORT REAGENTS**

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


**DATA**

**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.