



# RIOK1 (C-22): sc-130253

## BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. RIOK1 (RIO kinase 1), also known as RIO1 or AD034, is a 568 amino acid protein that contains one protein kinase domain and belongs to the RIO subfamily of atypical Ser/Thr protein kinases. Existing as two alternatively spliced isoforms, RIOK1 functions to catalyze the ATP-dependent phosphorylation of target proteins and is thought to play an important role in ribosome biogenesis and cell cycle progression.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RIOK1 (human) mapping to 6p24.3.

## STORAGE

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

## SOURCE

RIOK1 (C-22) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of RIOK1 of human origin.

## PRODUCT

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

## APPLICATIONS

RIOK1 (C-22) is recommended for detection of RIOK1 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RIOK1 siRNA (h): sc-95193, RIOK1 shRNA Plasmid (h): sc-95193-SH and RIOK1 shRNA (h) Lentiviral Particles: sc-95193-V.

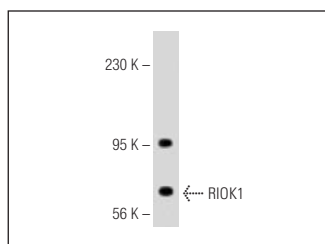
Molecular Weight of RIOK1: 66 kDa.

Positive Controls: A-375 cell lysate: sc-3811.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), 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



RIOK1 (C-22): sc-130253. Western blot analysis of RIOK1 expression in A-375 whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.