

# Krs-1 (H-35): sc-292269

## BACKGROUND

Sterile-20 (Ste20) is a serine/threonine kinase in *Saccharomyces cerevisiae* that is involved in relaying signals from G protein-coupled receptors to cytosolic MAP kinase cascades. Mammalian protein kinases that display sequence similarity to Ste20 are divided into two groups, the PAK subfamily and the GCK subfamily. The PAK subfamily members contain a C-terminal catalytic domain and an N-terminal regulatory domain with a p21<sup>Rac/Cdc42</sup>-binding site, and these kinases can activate both p38 MAPK and JNK. The GCK subfamily members contain a C-terminal regulatory domain and an N-terminal catalytic domain, and they have diverse roles in many pathways, including the activation of ERK, JNK, p38 MAPK, and caspase-3. The mammalian Ste20-like kinases (MST kinases), also known as Krs proteins, are members of the GCK subfamily. Ksr-1 (MST-2) and Ksr-2 (MST-1) are both direct substrates of caspase-3 that accelerate caspase-3 activation. MST-3 is ubiquitously expressed in mammalian tissue and can phosphorylate exogenous substrates as well as itself. MST-4 is highly expressed in placenta, thymus, and peripheral blood leukocytes, and it specifically activates ERK.

## CHROMOSOMAL LOCATION

Genetic locus: STK3 (human) mapping to 8q22.2; Stk3 (mouse) mapping to 15 B3.1.

## SOURCE

Krs-1 (H-35) is a rabbit polyclonal antibody raised against amino acids 316-350 mapping within an internal region of Krs-1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

Krs-1 (H-35) is recommended for detection of Krs-1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Krs-1 (H-35) is also recommended for detection of Krs-1 in additional species, including avian.

Suitable for use as control antibody for Krs-1 siRNA (h): sc-39247, Krs-1 siRNA (m): sc-39248, Krs-1 shRNA Plasmid (h): sc-39247-SH, Krs-1 shRNA Plasmid (m): sc-39248-SH, Krs-1 shRNA (h) Lentiviral Particles: sc-39247-V and Krs-1 shRNA (m) Lentiviral Particles: sc-39248-V.

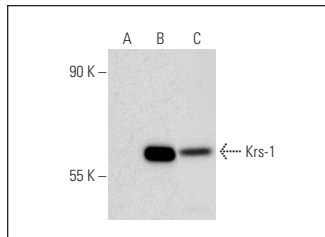
Molecular Weight of Krs-1: 63 kDa.

Positive Controls: Krs-1 (h): 293 Lysate: sc-111111 or NIH/3T3 whole cell lysate: sc-2210.

## 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Krs-1 (H-35): sc-292269. Western blot analysis of Krs-1 expression in non-transfected 293: sc-110760 (A), human Krs-1 transfected 293: sc-111111 (B) and NIH/3T3 (C) whole cell lysates.

## 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **Krs-1 (87.K): sc-130405**, our highly recommended monoclonal alternative to Krs-1 (H-35).