# STK16 (H-80): sc-292046



The Power to Question

## **BACKGROUND**

The phosphorylation of proteins by protein kinases and protein phosphatases is a key event in most nuclear and cytoplasmic processes. The ability to activate and deactivate proteins via phosphorylation or dephosphorylation is important for cell division, cell differentiation, DNA repair and transcription. STK16 (serine/threonine kinase 16), also known as KRCT, MPSK, TSF1 or PKL12, is a 305 amino acid lipid-anchored membrane protein that belongs to the superfamily of serine/threonine protein kinases. Expressed ubiquitously at low levels, STK16 is a protein kinase that can catalytically phosphorylate both serine and threonine residues on a variety of proteins. STK16 functions in an ATP-dependent manner and contains one protein kinase domain. Overexpression of STK16 causes disorganization of the Golgi apparatus, suggesting an additional role for STK16 in the secretory pathway. Human STK16 shares 94% sequence identity with its mouse counterpart, indicating a conserved function between species.

## CHROMOSOMAL LOCATION

Genetic locus: STK16 (human) mapping to 2q35; Stk16 (mouse) mapping to 1 C3.

#### SOURCE

STK16 (H-80) is a rabbit polyclonal antibody raised against amino acids 226-305 mapping at the C-terminus of STK16 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

# **STORAGE**

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

## **APPLICATIONS**

STK16 (H-80) is recommended for detection of STK16 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).

STK16 (H-80) is also recommended for detection of STK16 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for STK16 siRNA (h): sc-94757, STK16 siRNA (m): sc-153894, STK16 shRNA Plasmid (h): sc-94757-SH, STK16 shRNA Plasmid (m): sc-153894-SH, STK16 shRNA (h) Lentiviral Particles: sc-94757-V and STK16 shRNA (m) Lentiviral Particles: sc-153894-V.

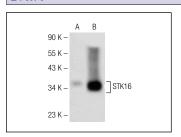
Molecular Weight of STK16: 34 kDa.

Positive Controls: STK16 (h): 293T Lysate: sc-116468, A-431 whole cell lysate: sc-2201 or mouse brain extract: sc-2253.

#### **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**



STK16 (H-80): sc-292046. Western blot analysis of STK16 expression in non-transfected: sc-117752 (A) and human STK16 transfected: sc-116468 (B) 293T whole cell Ivsates.

#### **RESEARCH USE**

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

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **STK16 (B-10):** sc-374356, our highly recommended monoclonal alternative to STK16 (H-80).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com