

# POSH (M-290): sc-28866

## BACKGROUND

Rho, Rac and Cdc42 are members of the small GTPase family. These proteins act as molecular switches, cycling between an active GTP-bound state and an inactive GDP-bound state. Activation of these proteins results in rearrangements of filamentous Actin and the formation of Actin stress fibers. Many of the targets of these GTPases are involved in signal transduction events mediated by Src3 homology (SH3) domains. POSH, for "plenty of SH3s", is a Rac binding protein with four SH3 domains. POSH preferentially interacts with the GTP form of Rac and not with the GDP-bound Rac. Ectopic expression of POSH elicits JNK activation and nuclear translocation of NFκB, suggesting that POSH is involved in Rac regulation of these kinase pathways. Overexpression of POSH has also been shown to induce apoptosis.

## CHROMOSOMAL LOCATION

Genetic locus: SH3MD2 (human) mapping to 4q32.3; Sh3md2 (mouse) mapping to 8 B3.1.

## SOURCE

POSH (M-290) is a rabbit polyclonal antibody raised against amino acids 591-880 mapping near the C-terminus of POSH of mouse 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.

## PROTOCOLS

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

## APPLICATIONS

POSH (M-290) is recommended for detection of POSH 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).

POSH (M-290) is also recommended for detection of POSH in additional species, including equine.

Suitable for use as control antibody for POSH siRNA (h): sc-36293, POSH siRNA (m): sc-36294, POSH shRNA Plasmid (h): sc-36293-SH, POSH shRNA Plasmid (m): sc-36294-SH, POSH shRNA (h) Lentiviral Particles: sc-36293-V and POSH shRNA (m) Lentiviral Particles: sc-36294-V.

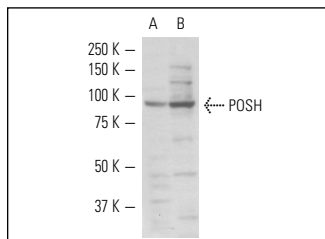
Molecular Weight of POSH: 111 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or HeLa whole cell lysate: sc-2200.

## 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



POSH (M-290): sc-28866. Western blot analysis of POSH expression in KNRK (A) and HeLa (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Taylor, J., Chung, K.H., Figueroa, C., Zurawski, J., Dickson, H.M., Brace, E.J., Avery, A.W., Turner, D.L. and Vojtek, A.B. 2008. The scaffold protein POSH regulates axon outgrowth. *Mol. Biol. Cell.* 19: 5181-5192.

## RESEARCH USE

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



Try **POSH (E-1): sc-390103** or **POSH (A-4): sc-376059**, our highly recommended monoclonal alternatives to POSH (M-290).