

# phostensin (S-12): sc-168949

## BACKGROUND

In eukaryotes, the phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions, including division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the protein phosphatases, specifically PP1 (protein phosphatase 1), which is targeted to different substrates throughout the cell. Phostensin, also known as KIAA1949, is a 613 amino acid protein that localizes to both the cytoplasm and the cytoskeleton. Expressed predominately in spleen, ovary, lung and liver tissue, phostensin functions as a regulatory subunit that interacts with and targets PP1 to F-Actin in the cytoskeleton. Two isoforms of phostensin exist due to alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: KIAA1949 (human) mapping to 6p21.33; 2310014H01Rik (mouse) mapping to 17 B1.

## SOURCE

phostensin (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of phostensin 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.

Blocking peptide available for competition studies, sc-168949 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

phostensin (S-12) is recommended for detection of phostensin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

phostensin (S-12) is also recommended for detection of phostensin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for phostensin siRNA (h): sc-95055, phostensin siRNA (m): sc-152234, phostensin shRNA Plasmid (h): sc-95055-SH, phostensin shRNA Plasmid (m): sc-152234-SH, phostensin shRNA (h) Lentiviral Particles: sc-95055-V and phostensin shRNA (m) Lentiviral Particles: sc-152234-V.

Molecular Weight of phostensin isoforms: 26/68 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.