

# Hhip (K-15): sc-9407

## BACKGROUND

Hedgehog (Hh) signaling proteins are critical for growth and tissue patterning during development. Patched (Ptc), a putative 12 transmembrane receptor, binds to Sonic hedgehog and is suspected to be a negative regulator of Hh signaling. A family member of patched, designated patched 2, has been found to be co-expressed with sonic hedgehog. Smoothened (Smo), a seven transmembrane receptor, is complexed with patched in many tissues and is believed to be an essential component in the Hh signaling pathway. Hhip (hedgehog-interacting protein) is able to bind to and may be a transcriptional target of all Hh proteins. Binding of Hhip to Hh proteins attenuates Hedgehog signaling.

## REFERENCES

1. Stone, D.M., et al. 1996. The tumour-suppressor gene patched encodes a candidate receptor for Sonic hedgehog. *Nature* 384: 129-134.
2. Goodrich, L.V., et al. 1996. Conservation of the hedgehog/patched signaling pathway from flies to mice: induction of a mouse patched gene by Hedgehog. *Genes Dev.* 10: 301-312.
3. Marigo, V., et al. 1996. Regulation of patched by Sonic hedgehog in the developing neural tube. *Proc. Natl. Acad. Sci. USA* 93: 9346-9351.

## CHROMOSOMAL LOCATION

Genetic locus: HHIP (human) mapping to 4q31.21; Hhip (mouse) mapping to 8 C2.

## SOURCE

Hhip (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Hhip 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.

Blocking peptide available for competition studies, sc-9407 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Hhip (K-15) is recommended for detection of Hhip 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Hhip (K-15) is also recommended for detection of Hhip in additional species, including equine, canine, bovine and avian.

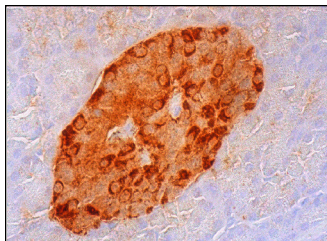
Suitable for use as control antibody for Hhip siRNA (h): sc-43835, Hhip siRNA (m): sc-40164, Hhip shRNA Plasmid (h): sc-43835-SH, Hhip shRNA Plasmid (m): sc-40164-SH, Hhip shRNA (h) Lentiviral Particles: sc-43835-V and Hhip shRNA (m) Lentiviral Particles: sc-40164-V.

Molecular Weight of Hhip: 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Hhip (K-15): sc-9407. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of islets of Langerhans.

## SELECT PRODUCT CITATIONS

1. Tang, X., et al. 2004. Ornithine decarboxylase is a target for chemoprevention of basal and squamous cell carcinomas in Ptc1<sup>+/-</sup> mice. *J Clin Invest.* 113: 867-875.

## 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.

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Try **Hhip (5D11): sc-293265**, our highly recommended monoclonal alternative to Hhip (K-15).