

HIPK1 (P-16): sc-10289

BACKGROUND

The homeodomain-interacting protein kinase (HIPK) family, which includes HIPK1, HIPK2, HIPK3, contains a conserved protein kinase domain as well as a separate domain that interacts with homeoproteins. HIPK2, the most highly characterized family member, is thought to act as a co-repressor of homeodomain transcription factors, as HIPK2 has been shown to enhance the DNA binding of the NK-3 homeoprotein *in vitro*. HIPK2 is regulated by a posttranslational modification of a ubiquitin-like protein, SUMO-1, via covalent bonding to a lysine residue on HIPK2. This is similar to the binding of SUMO-1 to PML and SP-100. The conjugation of SUMO-1 is thought to direct each of these proteins to nuclear bodies (NBs), which appear to play a role in autoimmunity and viral protection. HIPK2 is the first protein kinase to be directed to nuclear bodies in response to ubiquitin-like modification.

CHROMOSOMAL LOCATION

Genetic locus: HIPK1 (human) mapping to 1p13.2; Hipk1 (mouse) mapping to 3 F2.2.

SOURCE

HIPK1 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HIPK1 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-10289 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HIPK1 (P-16) is recommended for detection of HIPK1 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).

HIPK1 (P-16) is also recommended for detection of HIPK1 in additional species, including equine.

Suitable for use as control antibody for HIPK1 siRNA (h): sc-39048, HIPK1 siRNA (m): sc-39049, HIPK1 shRNA Plasmid (h): sc-39048-SH, HIPK1 shRNA Plasmid (m): sc-39049-SH, HIPK1 shRNA (h) Lentiviral Particles: sc-39048-V and HIPK1 shRNA (m) Lentiviral Particles: sc-39049-V.

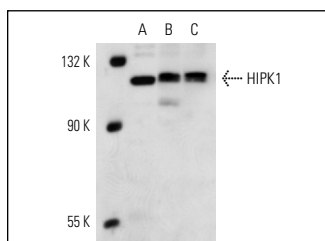
Molecular Weight of HIPK1: 120 kDa.

Positive Controls: DU 145 cell lysate: sc-2268, MCF7 whole cell lysate: sc-2206 or SW480 cell lysate: sc-2219.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



HIPK1 (P-16): sc-10289. Western blot analysis of HIPK1 expression in DU 145 (A), MCF7 (B) and SW480 (C) nuclear extracts.

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.


 MONOS
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Guaranteed

Try **HIPK1 (SR-5): sc-100382**, our highly recommended monoclonal alternative to HIPK1 (P-16).