**BACKGROUND**

The homeodomain-interacting protein kinase (HIPK) family, which includes HIPK1, HIPK2 and HIPK3, are evolutionarily conserved nuclear serine/threonine kinases that interact with homeoproteins. The HIPK family of proteins act as transcriptional regulators, chromatin modifiers, cytoplasmic signal transducers, transmembrane proteins and the E2 component of SUMO ligase. HIPK1 is a 1,210 amino acid protein that is ubiquitously expressed, with highest levels in skeletal muscle and heart. HIPK1 may play a role as a corepressor for homeodomain transcription factors and may phosphorylate Daxx in response to stress. It is suggested that HIPK1 may be involved in malignant squamous cell tumor formation. Four isoforms exist due to alternative splicing events.

**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

HIPK1 (SR-5) is a mouse monoclonal antibody raised against recombinant HIPK1 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG2a kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

**RESEARCH USE**

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

**APPLICATIONS**

HIPK1 (SR-5) 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).

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-39048-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 HeLa whole cell lysate: sc-2200.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG® BP-HRP: sc-516102 or m-IgG® BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG® BP-FITC: sc-516140 or m-IgG® BP-PE: sc-516141 (dilution range 1:50-1:100) with UltraCruz® Hard-set Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**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 for detailed protocols and support products.