

HUNK (I-12): sc-46142

BACKGROUND

The HUNK (hormonally upregulated Neu-associated kinase) protein, also designated MAK-V in mouse, has been identified as a novel SNF1-related serine/threonine kinase. The human HUNK gene localizes to chromosome 21q22 and encodes a protein with nucleocytoplasmic distribution and localizes to the centrosome. Overexpression of the HUNK protein associates with approximately 50% of breast carcinomas, and may provide diagnostic-prognostic value as a molecular marker. Serine/threonine-protein kinase SNF1-like kinase 2 (SIK) phosphorylates Ser-794 of IRS1 in Insulin-stimulated adipocytes, which may modulate the efficiency of Insulin signal transduction. SIK is activated by phosphorylation on Thr-175 by STK11 in complex with STE20-related adapter- α and CAB39.

REFERENCES

1. Korobko, I.V., et al. 2000. The MAK-V protein kinase regulates endocytosis in mouse. *Mol. Gen. Genet.* 264: 411-418.
2. Gardner, H.P., et al. 2000. Developmental role of the SNF1-related kinase HUNK in pregnancy-induced changes in the mammary gland. *Development* 127: 4493-4509.
3. Gardner, H.P., et al. 2000. Cloning and characterization of HUNK, a novel mammalian SNF1-related protein kinase. *Genomics* 63: 46-59.
4. Korobko, I.V., et al. 2004. Proteinkinase MAK-V/HUNK as a possible diagnostic and prognostic marker of human breast carcinoma. *Arkh. Patol.* 66: 6-9.
5. Korobko, E.V., et al. 2004. Subcellular localization of MAK-V/HUNK protein kinase expressed in COS-1 cells. *Cell Biol. Int.* 28: 49-56.
6. Korobko, E.V., et al. 2005. Molecular cloning and characterization of the mouse mak-v/HUNK gene promoter. *Mol. Biol.* 39: 72-79.

CHROMOSOMAL LOCATION

Genetic locus: HUNK (human) mapping to 21q22.11; Hunk (mouse) mapping to 16 C3.3.

SOURCE

HUNK (I-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HUNK of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46142 P, (100 μ g 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.

RESEARCH USE

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

APPLICATIONS

HUNK (I-12) is recommended for detection of HUNK 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).

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

Suitable for use as control antibody for HUNK siRNA (h): sc-44362, HUNK siRNA (m): sc-44363, HUNK shRNA Plasmid (h): sc-44362-SH, HUNK shRNA Plasmid (m): sc-44363-SH, HUNK shRNA (h) Lentiviral Particles: sc-44362-V and HUNK shRNA (m) Lentiviral Particles: sc-44363-V.

Molecular Weight of HUNK: 80 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.