SANTA CRUZ BIOTECHNOLOGY, INC.

HUNK (B-7): sc-514689

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 21q22.11 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 dianostic 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 (B-7) is a mouse monoclonal antibody raised against amino acids 361-514 mapping within an internal region of HUNK of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HUNK (B-7) is available conjugated to agarose (sc-514689 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514689 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514689 PE), fluorescein (sc-514689 FITC), Alexa Fluor® 488 (sc-514689 AF488), Alexa Fluor® 546 (sc-514689 AF546), Alexa Fluor® 594 (sc-514689 AF594) or Alexa Fluor® 647 (sc-514689 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514689 AF680) or Alexa Fluor® 790 (sc-514689 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

HUNK (B-7) is recommended for detection of HUNK of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 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.

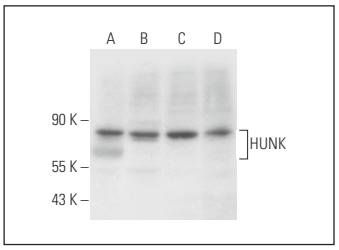
Molecular Weight of HUNK: 80 kDa.

Positive Controls: A549 cell lysate: sc-2413, MCF7 whole cell lysate: sc-2206 or ZR-75-1 cell lysate: sc-2241.

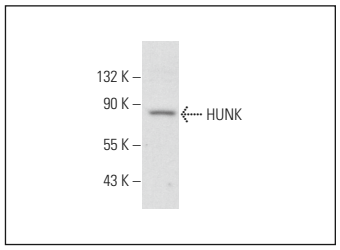
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



HUNK (B-7): sc-514689. Western blot analysis of HUNK expression in human adrenal gland tissue extract (**A**) and A549 (**B**), MCF7 (**C**) and ZR-75-1 (**D**) whole cell lysates.



HUNK (B-7): sc-514689. Western blot analysis of HUNK expression in F9 whole cell lysate.

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 for detailed protocols and support products.