SANTA CRUZ BIOTECHNOLOGY, INC.

nm23-H1 (L-14): sc-14787

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The nm23 gene, a potential suppressor of metastasis, was originally identified by differential hybridization between two murine melanoma sub-lines, one with a high and the second with a low metastatic capacity. Highly metastatic sub-lines exhibit much lower levels of nm23 than less metastatic cells. Based on sequence analysis, nm23 appears highly related to nucleotide diphosphate kinases (NDP). In humans, NDP kinases A and B are identical to two isotypes of human nm23 homologs, namely nm23-H1 and H2, respectively. nm23-H2 is identical in sequence to PuF, a transcription factor that binds to nuclease-hypersensitive elements at positions 142 to 115 of the human C-Myc promotor.

REFERENCES

1. Steeg, P.S., et al. 1988. Evidence for a novel gene associated with low tumor metastatic potential. J. Natl. Cancer Inst. 80: 200-209.
2. Lacombe, M., et al. 1990. Functional cloning of a nucleoside diphosphate kinase from *Dictyostelium discoideum*. J. Biol. Chem. 265: 10012-10018.

CHROMOSOMAL LOCATION

Genetic locus: NME1 (human) mapping to 17q21.33; Nme1 (mouse) mapping to 11 D.

SOURCE

nm23-H1 (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of nm23-H1 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-14787 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

nm23-H1 (L-14) is recommended for detection of nm23-H1 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).

nm23-H1 (L-14) is also recommended for detection of nm23-H1 in additional species, including porcine.

Suitable for use as control antibody for nm23-H1 siRNA (h): sc-29414, nm23-H1 siRNA (m): sc-29415, nm23-H1 siRNA (r): sc-72194, nm23-H1 shRNA Plasmid (h): sc-29414-SH, nm23-H1 shRNA Plasmid (m): sc-29415-SH, nm23-H1 shRNA Plasmid (r): sc-72194-SH, nm23-H1 shRNA (h) Lentiviral Particles: sc-29414-V, nm23-H1 shRNA (m) Lentiviral Particles: sc-29415-V and nm23-H1 shRNA (r) Lentiviral Particles: sc-72194-V.

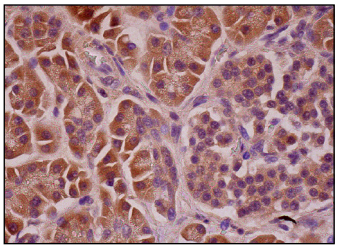
Molecular Weight of nm23-H1: 23 kDa.

Positive Controls: PC-3 cell lysate: sc-2220, HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

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



nm23-H1 (L-14): sc-14787. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells and Islets of Langerhans.

SELECT PRODUCT CITATIONS

1. Zippo, A., et al. 2004. Identification of Flk-1-target genes in vasculogenesis: Pim-1 is required for endothelial and mural cell differentiation *in vitro*. Blood 103: 4536-4544.

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.