

nm23-H2 (L-15): sc-14790

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 isoforms 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 promoter.

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: NME2 (human) mapping to 17q21.33; Nme2 (mouse) mapping to 11 D.

SOURCE

nm23-H2 (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of nm23-H2 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-14790 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

nm23-H2 (L-15) is recommended for detection of nm23-H2 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), 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); weakly cross-reactive with nm23-H1.

nm23-H2 (L-15) is also recommended for detection of nm23-H2 in additional species, including bovine and porcine.

Suitable for use as control antibody for nm23-H2 siRNA (h): sc-40774, nm23-H2 siRNA (m): sc-40775, nm23-H2 shRNA Plasmid (h): sc-40774-SH, nm23-H2 shRNA Plasmid (m): sc-40775-SH, nm23-H2 shRNA (h) Lentiviral Particles: sc-40774-V and nm23-H2 shRNA (m) Lentiviral Particles: sc-40775-V.

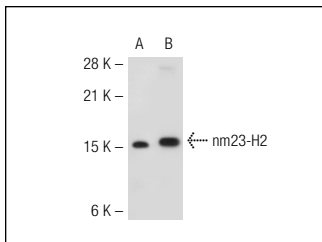
Molecular Weight of nm23-H2: 17 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or NRK whole cell lysate: sc-364197.

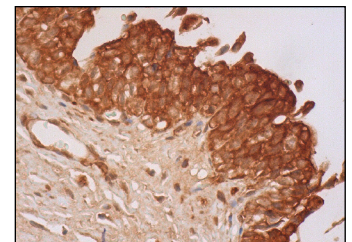
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



nm23-H2 (L-15): sc-14790. Western blot analysis of nm23-H2 expression in CHO (A) and NRK (B) whole cell lysates.



nm23-H2 (L-15): sc-14790. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic, membrane and nuclear staining of urothelial cells.

SELECT PRODUCT CITATIONS

1. Crawford, R.M., et al. 2005. A novel physical and functional association between nucleoside diphosphate kinase A and AMP-activated protein kinase $\alpha 1$ in liver and lung. *Biochem. J.* 392: 201-209.

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 or our catalog for detailed protocols and support products.


 MONOS
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Try **nm23-H2 (X-42): sc-100400**, our highly recommended monoclonal alternative to nm23-H2 (L-15).