

nm23-H4 (H-53) : sc-99071

BACKGROUND

The nm23 gene (Metastasis inhibition factor nm23), a potential suppressor of metastasis, is expressed at a much lower level in highly metastatic cells than in cells with lower metastatic potential. Based on sequence analysis, nm23, also designated nucleoside diphosphate kinase A (NDK A) or Tumor metastatic process-associated protein, appears to be highly related to nucleotide diphosphate kinases (NDP). NDP kinases A and B are identical to two isotypes of human nm23 homologs, nm23-H1 and nm23-H2, respectively. nm23-H2 is also 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. nm23-H3 and nm23-H4 are important for the synthesis of nucleoside triphosphates and may play a role in apoptosis induction and hematopoiesis. nm23-H4 localizes to the mitochondrial intermembrane space and is widely expressed, with higher levels detected in prostate, heart, liver, small intestine, and skeletal muscle tissues. Low amounts of nm23-H4 are observed in the brain and in blood leukocytes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NME4 (human) mapping to 16p13.3; Nme4 (mouse) mapping to 17 A3.3.

SOURCE

nm23-H4 (H-53) is a rabbit polyclonal antibody raised against amino acids 54-106 mapping within an internal region of nm23-H4 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.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

nm23-H4 (H-53) is recommended for detection of nm23-H4 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).

nm23-H4 (H-53) is also recommended for detection of nm23-H4 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for nm23-H4 siRNA (h): sc-61207, nm23-H4 siRNA (m): sc-61208, nm23-H4 shRNA Plasmid (h): sc-61207-SH, nm23-H4 shRNA Plasmid (m): sc-61208-SH, nm23-H4 shRNA (h) Lentiviral Particles: sc-61207-V and nm23-H4 shRNA (m) Lentiviral Particles: sc-61208-V.

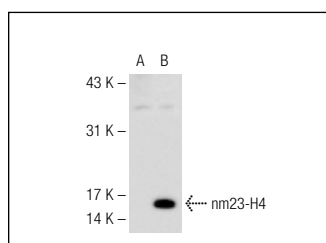
Molecular Weight of nm23-H4: 21 kDa.

Positive Controls: nm23-H4 (h): 293 Lysate: sc-113212.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



nm23-H4 (H-53): sc-99071. Western blot analysis of nm23-H4 expression in non-transfected: sc-110760 (A) and human nm23-H4 transfected: sc-113212 (B) 293 whole cell lysates.

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.