nm23-H3 (C-16): sc-50945



The Power to Question

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-H3 is a 168 amino acid polypeptide. It is preferentially expressed during early stages of myeloid differentiation of highly purified CD34+ cells.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NME3 (human) mapping to 16p13.3; Nme3 (mouse) mapping to 17 A3.3.

SOURCE

nm23-H3 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of nm23-H3 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-50945 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

nm23-H3 (C-16) is recommended for detection of nm23-H3 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).

nm23-H3 (C-16) is also recommended for detection of nm23-H3 in additional species, including bovine and porcine.

Suitable for use as control antibody for nm23-H3 siRNA (h): sc-61205, nm23-H3 siRNA (m): sc-61206, nm23-H3 shRNA Plasmid (h): sc-61205-SH, nm23-H3 shRNA Plasmid (m): sc-61206-SH, nm23-H3 shRNA (h) Lentiviral Particles: sc-61205-V and nm23-H3 shRNA (m) Lentiviral Particles: sc-61206-V.

Molecular Weight of nm23-H3: 19 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.

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.



Try **nm23-H1/2/3 (E-11): sc-166937**, our highly recommended monoclonal alternative to nm23-H3 (C-16).

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