

nm23-H1 (C-20): sc-343

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 nucleoside 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.

CHROMOSOMAL LOCATION

Genetic locus: NME1/NME2 (human) mapping to 17q21.33.

SOURCE

nm23-H1 (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-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.

nm23-H1 (C-20) is available conjugated to HRP (sc-343 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; and to fluorescein (sc-343 FITC, 200 µg/ml), for IF, IHC(P) and FCM.

In addition, nm23-H1 (C-20) is available conjugated to TRITC (sc-343 TRITC, 200 µg/ml), for IF, IHC(P) and FCM.

Blocking peptide available for competition studies, sc-343 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

nm23-H1 (C-20) is recommended for detection of nm23-H1 and to a lesser extent, nm23-H2 of human and rat 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-H1 (C-20) is also recommended for detection of nm23-H1 and to a lesser extent, nm23-H2 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of nm23-H1: 23 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

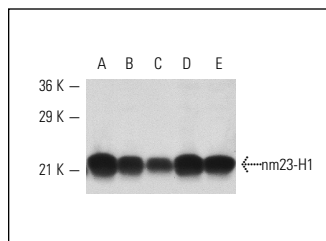
RESEARCH USE

For research use only, not for use in diagnostic procedures and support products.

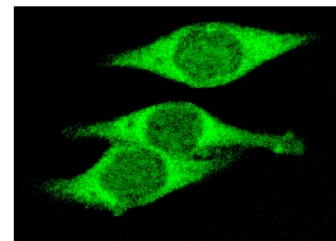
STORAGE

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

DATA



nm23-H1 (C-20): sc-343. Western blot analysis of nm23-H1 expression in HeLa (A), A-431 (B), Jurkat (C), K-562 (D) and BJAB (E) whole cell lysates.



nm23-H1 (C-20): sc-343. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear staining.

SELECT PRODUCT CITATIONS

- Ji, L., et al. 1995. The transcription factor, nm23H2, binds to and activates the translocated c-Myc allele in Burkitt's lymphoma. *J. Biol. Chem.* 270: 13392-13398.
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- Curtis, C.D., et al. 2010. Immunohistochemical analysis of oxidative stress and DNA repair proteins in normal mammary and breast cancer tissues. *BMC Cancer* 10: 9.
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 MONOS
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Try **nm23-H1 (C-8): sc-514515** or **nm23-H1 (37.6): sc-56928**, our highly recommended monoclonal alternatives to nm23-H1 (C-20).