# nm23-H2 (L-14): sc-14789



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.

# **CHROMOSOMAL LOCATION**

Genetic locus: NME1/2 (human) mapping to 17q21.33; Nme2 (mouse) mapping to 11 D.

#### SOURCE

nm23-H2 (L-14) 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  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-14789 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

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

# **APPLICATIONS**

nm23-H2 (L-14) is recommended for detection of nm23-H2 and NDK8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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-H2 (L-14) is also recommended for detection of nm23-H2 and NDK8 in additional species, including canine and bovine.

Suitable for use as control antibody for nm23-H2 siRNA (h): sc-40774, nm23-H2 siRNA (m): sc-40775, nm23-H2 siRNA (r): sc-72195, nm23-H2 shRNA Plasmid (h): sc-40774-SH, nm23-H2 shRNA Plasmid (m): sc-40775-SH, nm23-H2 shRNA Plasmid (r): sc-72195-SH, nm23-H2 shRNA (h) Lentiviral Particles: sc-40774-V, nm23-H2 shRNA (m) Lentiviral Particles: sc-40775-V and nm23-H2 shRNA (r) Lentiviral Particles: sc-72195-V.

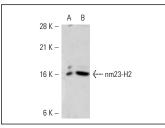
Molecular Weight of nm23-H2: 17 kDa.

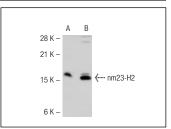
Positive Controls: nm23-H2 (h): 293 Lysate: sc-111270, NRK whole cell lysate: sc-364197 or Jurkat whole cell lysate: sc-2204.

#### **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.

## **DATA**





nm23-H2 (L-14): sc-14789. Western blot analysis of nm23-H2 expression in non-transfected: sc-110760 (**A**) and human nm23-H2 transfected: sc-111270 (**B**) 293 whole cell Ivsates.

nm23-H2 (L-14): sc-14789. Western blot analysis of nm23-H2 expression in CHO (**A**) and NRK (**B**) whole cell lyeates

## **SELECT PRODUCT CITATIONS**

- Lim, J.Q., et al. 2012. Diva/BclB regulates differentiation by inhibiting NDPKB/Nm23H2-mediated neuronal differentiation in PC-12 cells. BMC Neurosci. 13: 123.
- 2. Chang, Y.W., et al. 2015. CARMA3 represses metastasis-suppressor NME2 to promote lung cancer stemness and metastasis. Am. J. Respir. Crit. Care Med. E-published.

#### **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-H2 (X-42): sc-100400**, our highly recommended monoclonal alternative to nm23-H2 (L-14).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com