

# nm23-H7 (C-15): sc-82256

## BACKGROUND

nm23-H7, also known as NME7 (non-metastatic cells 7), is a 376 amino acid protein that contains one DM10 domain and belongs to the NDK family. Using magnesium as a cofactor, nm23-H7 functions to catalyze the ATP-dependent creation of nucleoside triphosphates, thereby playing an essential role in metabolic pathways throughout the body. The gene encoding nm23-H7 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

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3. Kimura, N., Shimada, N., Fukuda, M., Ishijima, Y., Miyazaki, H., Ishii, A., Takagi, Y. and Ishikawa, N. 2000. Regulation of cellular functions by nucleoside diphosphate kinases in mammals. *J. Bioenerg. Biomembr.* 32: 309-315.
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## CHROMOSOMAL LOCATION

Genetic locus: NME7 (human) mapping to 1q24.2; Nme7 (mouse) mapping to 1 H2.2.

## SOURCE

nm23-H7 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of nm23-H7 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-82256 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

nm23-H7 (C-15) is recommended for detection of nm23-H7 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-H7 (C-15) is also recommended for detection of nm23-H7 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for nm23-H7 siRNA (h): sc-75935, nm23-H7 siRNA (m): sc-75936, nm23-H7 shRNA Plasmid (h): sc-75935-SH, nm23-H7 shRNA Plasmid (m): sc-75936-SH, nm23-H7 shRNA (h) Lentiviral Particles: sc-75935-V and nm23-H7 shRNA (m) Lentiviral Particles: sc-75936-V.

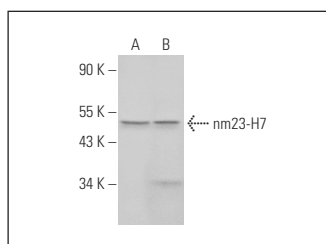
Molecular Weight of nm23-H7: 42 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HEK293 whole cell lysate: sc-45136 or T-47D cell lysate: sc-2293.

## 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-H7 (C-15): sc-82256. Western blot analysis of nm23-H7 expression in HEK293 (A) and T-47D (B) whole cell lysates.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.