

nm23-H6 (G-18): sc-82252

BACKGROUND

nm23-H6, also known as NME6 (nucleoside diphosphate kinase 6), is a 186 amino acid protein that localizes to the mitochondrion and belongs to the NDK family of kinases. Expressed ubiquitously with highest expression in ovary, kidney, spleen, prostate and intestine, nm23-H6 uses magnesium as a cofactor to catalyze the ATP-dependent creation of nucleoside triphosphates and, via this catalytic activity, is thought to be involved in cell growth, cell cycle progression and apoptotic control. The gene encoding nm23-H6 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

1. Postel, E.H. 1998. nm23-NDP kinase. *Int. J. Biochem. Cell Biol.* 30: 1291-1295.
2. Mehus, J.G., Deloukas, P. and Lambeth, D.O. 1999. NME6: a new member of the nm23/nucleoside diphosphate kinase gene family located on human chromosome 3p21.3. *Hum. Genet.* 104: 454-459.
3. Tsuiji, H., Nitta, M., Furuya, A., Hanai, N., Fujiwara, T., Inagaki, M., Kochi, M., Ushio, Y., Saya, H. and Nakamura, H. 1999. A novel human nucleoside diphosphate (NDP) kinase, nm23-H6, localizes in mitochondria and affects cytokinesis. *J. Cell. Biochem.* 76: 254-269.
4. Lacombe, M.L., Milon, L., Munier, A., Mehus, J.G. and Lambeth, D.O. 2000. The human nm23/nucleoside diphosphate kinases. *J. Bioenerg. Biomembr.* 32: 247-258.
5. 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.
6. Online Mendelian Inheritance in Man, OMIM[™]. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 608294. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: NME6 (human) mapping to 3p21.31; Nme6 (mouse) mapping to 9 F2.

SOURCE

nm23-H6 (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of nm23-H6 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-82252 P, (100 µg 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-H6 (G-18) is recommended for detection of nm23-H6 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-H6 (G-18) is also recommended for detection of nm23-H6 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for nm23-H6 siRNA (h): sc-75933, nm23-H6 siRNA (m): sc-75934, nm23-H6 shRNA Plasmid (h): sc-75933-SH, nm23-H6 shRNA Plasmid (m): sc-75934-SH, nm23-H6 shRNA (h) Lentiviral Particles: sc-75933-V and nm23-H6 shRNA (m) Lentiviral Particles: sc-75934-V.

Molecular Weight of nm23-H6: 21 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.

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.