

# Novocastra™ Lyophilized Mouse Monoclonal Antibody nm23 Protein

## Product Code: NCL-nm23

<b>Intended Use</b>	<b>For In Vitro Diagnostic Use:</b> This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
<b>Specificity</b>	Human nm23-H1 protein (NDPK-A). Low crossreactivity with nm23-H2 homolog (NDPK-B).
<b>Clone</b>	37.6
<b>Ig Class</b>	IgG2a
<b>Antigen Used for Immunizations</b>	Nucleoside diphosphate kinase A purified from human erythrocytes.
<b>Hybridoma Partner</b>	Mouse myeloma (X63-Ag8-653).
<b>Preparation</b>	Lyophilized tissue culture supernatant containing 15 mM sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.
<b>Effective on Frozen Tissue</b>	Yes
<b>Effective on Paraffin Wax Embedded Tissue</b>	Yes
<b>Recommendations on Use</b>	Immunohistochemistry: Typical working dilution 1:100–1:250. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Western Blotting: Typical working dilution 1:100–1:250.
<b>Positive Controls</b>	Immunohistochemistry: A high proportion of breast carcinomas are positive. Western Blotting: MCF7 cell line.
<b>Staining Pattern</b>	Cytoplasmic.
<b>Storage and Stability</b>	Store unopened lyophilized antibody at 4 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4 °C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 °C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.
<b>General Overview</b>	nm23 is a heterodimeric protein that acts as a nucleoside diphosphate (NDP) kinase. Two human homologs of the nm23 gene have been isolated and designated nm23-H1 and nm23-H2. The products of these genes encode the A and B polypeptide chains of the nucleoside diphosphate kinase, respectively. Each chain consists of 152 amino acid residues that by random association form isoenzymes. NDP kinases are involved in the synthesis of nucleoside triphosphates, and the nm23 protein may act in the regulation of signal transduction by complexing with G proteins, causing activation/inactivation of developmental pathways.
<b>General References</b>	Lee C S, Clarke R A, Tran K T, et al.. <i>Pathology</i> . 31 (2): 123–126 (1999). Aryee D N T, Strobel T, Kos K, et al.. <i>International Journal of Cancer</i> . 64: 104–111 (1995). Sawan A, Lascu I, Veron M, et al.. <i>Journal of Pathology</i> . 172: 27–34 (1994). Sastre-Garau X, Lacombe M L, Jouve M, et al.. <i>International Journal of Cancer</i> . 50: 533–538 (1992). Gilles A M, Presecan E, Vonica A, et al.. <i>Journal of Biological Chemistry</i> . 266: 8784–8789 (1991). Lacombe M L, Sastre-Garau X, Lascu I, et al.. <i>European Journal of Cancer</i> . 27: 1302–1307 (1991). Steeg P S, Bevilacqua G, Kopper L, et al.. <i>Journal of the National Cancer Institute</i> . 80: 200–204 (1988).

