

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human NM23-H2 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human NM23-H1 is observed.                                                                                                                       |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human NM23-H2<br>Ala2-Glu152<br>Accession # P22392                                                                                                                                                                                      |
| <b>Conjugate</b>          | Alexa Fluor 488<br>Excitation Wavelength: 488 nm<br>Emission Wavelength: 515-545 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

NM23-H2 or NME-2 (non-metastatic cell 2; also Nucleoside diphosphate kinase B, nm23-H2/B, NDPK-B and PUF) is a 17-19 kDa class 1 member of the NME/NDPK family of molecules. It is widely expressed, found in both cytosol and nucleus, and participates in multiple activities. In conjunction with nm23-H1, NME-2 forms homo- and heterohexamers (three dimers or two trimers) that mediate the transfer of phosphate from ATP to nucleoside diphosphates. It also serves as a transcriptional regulator of genes such as c-myc and PDGF-A. Human NME-2 is 152 amino acids (aa) in length. It contains a kinase region (aa 5-134), two potential phosphorylation sites (Tyr52 and Thr94), a phosphohistidine residue at position 118, and multiple lysine acetylation sites. There is one potential NME-2 splice form that shows a six aa substitution for aa 77-152. The genes for NME-1 and NME-2 are adjacent, and an unusual splicing event generates a 33 kDa fusion protein (NM23-LV) that is composed of aa 1-114 of NME-1 plus a Thr insert that is N-terminally coupled to full-length NME-2. Full-length human NME-2 shares 88% and 98% aa identity with human NME-1 and mouse NME-2, respectively.

## PRODUCT SPECIFIC NOTICES

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