

## DESCRIPTION

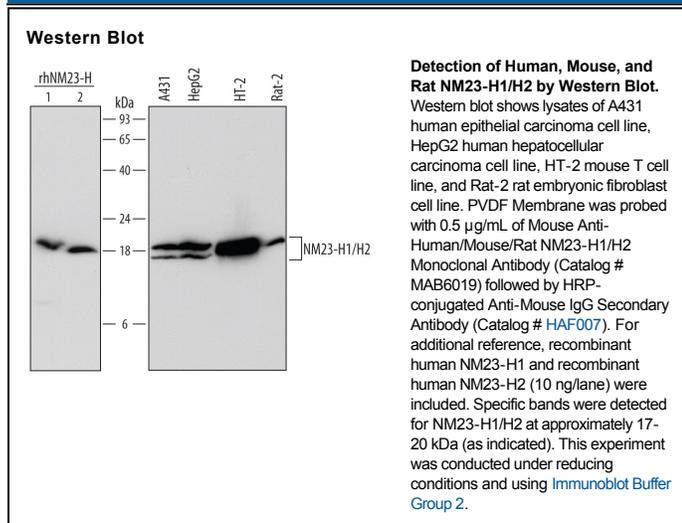
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human/Mouse/Rat   |
| <b>Specificity</b>        | Detects human, mouse, and rat NM23-H1/H2 in Western blots.  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 642825   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human NM23-H1/H2<br>Ala2-Glu152<br>Accession # P15531   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

## 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.

|                     | Recommended Concentration | Sample    |
|---------------------|---------------------------|-----------|
| <b>Western Blot</b> | 0.5 µg/mL                 | See Below |

## DATA



## PREPARATION AND STORAGE

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C   |
| <b>Stability &amp; Storage</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

## BACKGROUND

NM23-H1 (Non-metastatic protein 23 homolog 1; also NDKA and NME1) is a 19-20 kDa member of the NDK family of enzymes. NM23-H1 is ubiquitous in expression, and performs multiple functions. It forms disulfide-linked homohexamers, and heterohexamers with NM23-H2, generating a nucleoside diphosphate kinase that catalyzes a phosphoryl transfer from ATP to a nucleoside diphosphate. It also shows His and Ser/Thr protein kinase activity, and forms covalent linkages with molecules diverse as p53 and STRAP. It is found both intracellularly, and in blood at ng/mL concentrations. Human NM23-H1 is 152 amino acids (aa) in length, contains one NDP kinase domain (aa 5-134) and shows acetylation at Ala2 and Lys56, plus phosphorylation at Tyr52, Thr94, Ser122 and Ser125. Human NM23-H1 shares 89% aa identity with human 17-18 kDa NM23-H2, and 94% aa identity with mouse NM23-H1. A second H1 isoform named NM23-H1B with 25 additional aa at the N-terminus has also been described.