

DESCRIPTION

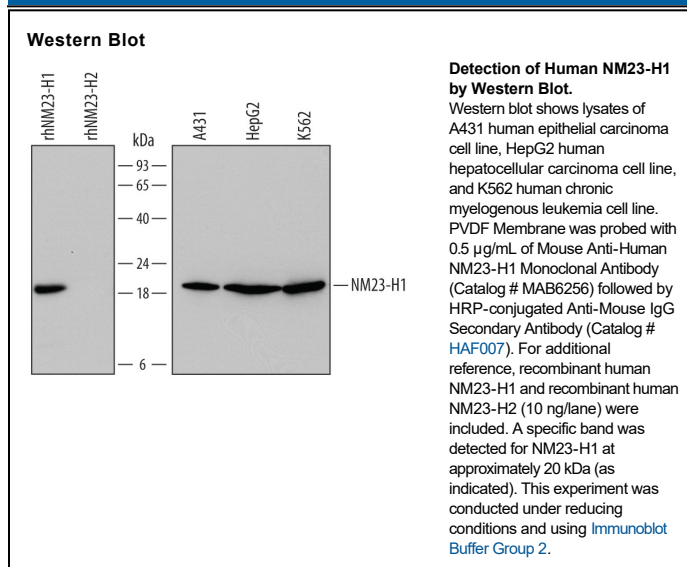
Species Reactivity	Human
Specificity	Detects human NM23-H1 in Western blots. In Western blots, no cross-reactivity with recombinant human NM23-H2 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 642817
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NM23-H1 Met1-Glu152 Accession # P15531
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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
Western Blot	0.5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

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

BACKGROUND

NM23-H1 (Non-metastatic protein 23 homolog 1; also NDKA) 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 homoheptamers, and heteroheptamers 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.