



Recombinant Protein Technical Manual  
Recombinant Human NME1/NDKA Protein (His Tag)  
RPES2683

#### Product Data:

**Product SKU:** RPES2683

**Size:** 50µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_000260.1

#### Protein Information:

**Molecular Mass:** 18 kDa

**AP Molecular Mass:** 21 kDa

**Tag:** N-His

**Bio-activity:**

**Purity:** > 98 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Nucleoside Diphosphate Kinase A; NDK A; NDP Kinase A; Granzyme A-Activated DNase; GAAD; Metastasis Inhibition Factor nm23; Tumor Metastatic Process-Associated Protein; nm23-H1; NME1; NDPKA; NM23;AWD;GAAD;NB;NBS;NDKA;NDPK-A;NM23-H1

## Immunogen Information:

**Sequence:** Ala 2-Glu 152

## Background:

NME1, also known as Nucleoside Diphosphate Kinase A (NDK-A), or NM23-H1, belongs to the NDK family. NM23-H1 is known to have a metastasis suppressive activity in many tumor cells. Recent studies have shown that the interacting proteins with NM23-H1 which mediate the cell proliferation, may act as modulators of the metastasis suppressor activity. The interacting proteins with NM23-H1 can be classified into 3 groups. The first group of proteins can be classified as upstream kinases of NM23-H1 such as CKI and Aurora-A/STK15. The second group of proteins acts as downstream effectors for the regulation of specific gene transcriptions, GTP-binding protein functions, and signal transduction in Erk signal cascade. The third group of proteins can be classified as bi-directionally influencing binding partners of NM23-H1. As a result, the interactions with NM23-H1 and binding partners have implications in the biochemical characterization involved in metastasis and tumorigenesis. NDKA is increased in human postmortem cerebrospinal fluid (CSF), a model of global brain insult, suggesting that measurement in CSF and, more importantly, in plasma may be useful as a biomarker of stroke. Additionally, NM23-H1 significantly reduces metastasis without effects on primary tumor size and was the first discovered metastasis suppressor gene.