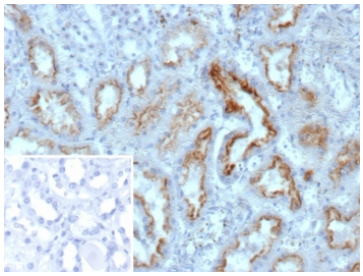
Nucleoside diphosphate kinase B Antibody / NDKB / NME2 [clone NME2/12061] (V5770)

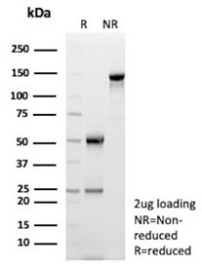
Catalog No.	Formulation	Size
V5770-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5770-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5770SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG, kappa
Clone Name	NME2/12061
Purity	Protein A/G affinity
UniProt	P22392
Localization	Cytoplasm, Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Nucleoside diphosphate kinase B antibody is available for research use only.



IHC analysis of Nucleoside diphosphate kinase B / NME2 antibody in human kidney tissue. Formalin-fixed, paraffin-embedded human kidney shows cytoplasmic HRP-DAB brown chromogenic staining in renal tubular epithelial cells, with minimal staining in glomerular compartments. Clone NME2/12061 demonstrates specific signal following heat-induced epitope retrieval in pH 9 10mM Tris with 1mM EDTA for 20 min. The inset negative control using PBS instead of primary antibody shows no specific staining.



SDS-PAGE analysis of purified, BSA-free Nucleoside diphosphate kinase B antibody (clone NME2/12061) as confirmation of integrity and purity.

Description

Nucleoside diphosphate kinase B antibody recognizes Nucleoside diphosphate kinase B, a highly conserved enzyme encoded by the human NME2 gene that plays a central role in cellular nucleotide metabolism. Nucleoside diphosphate kinase B antibody detects a ubiquitously expressed protein that catalyzes the transfer of terminal phosphates between nucleoside triphosphates and diphosphates, thereby maintaining balanced intracellular pools of ATP, GTP, CTP, and UTP required for DNA synthesis, RNA transcription, and energy-dependent signaling processes. NDKB is primarily localized in the cytoplasm but can also be observed in the nucleus depending on cell type and functional state.

Nucleoside diphosphate kinase B antibody, also referred to as NME2 antibody and nm23-H2 antibody in the literature, targets a member of the NME family of nucleoside diphosphate kinases. The NDKB protein forms hexameric complexes and contains a conserved histidine residue within its catalytic pocket that undergoes transient phosphorylation during phosphotransfer reactions. Through this mechanism, NDKB contributes to regulation of GTP-dependent signaling pathways and supports small GTP-binding protein function.

The NME2 gene is located on chromosome 17q21.3 and is closely related to NME1, another well-characterized metastasis-associated gene family member. Beyond its enzymatic activity, NDKB has been implicated in transcriptional regulation, cell proliferation control, and differentiation processes. Interaction with regulatory proteins allows NDKB to influence signaling networks that extend beyond nucleotide homeostasis.

Altered expression of NME family proteins has been reported in several tumor types, where expression levels may correlate with tumor progression or metastatic behavior depending on cellular context. Because NDKB participates in pathways influencing cytoskeletal organization, vesicle trafficking, and signal transduction, it has been studied in relation to cancer biology and cellular motility.

Expression of NDKB is widespread across normal tissues, reflecting its essential metabolic role. Its consistent presence in proliferating and differentiated cells makes Nucleoside diphosphate kinase B antibody useful for investigating nucleotide regulation mechanisms, signal integration pathways, and tumor-associated metabolic changes.

Clone NME2/12061 is a monoclonal antibody developed to detect NDKB protein in research applications. An antibody to Nucleoside diphosphate kinase B is suitable for studying NME2 expression and for examining cellular metabolism and signaling dynamics in relevant experimental systems.

Application Notes

Optimal dilution of the Nucleoside diphosphate kinase B antibody should be determined by the researcher.

Immunogen

A recombinant full-length human NME2 protein was used as the immunogen for the Nucleoside diphosphate kinase B antibody.

Storage

Aliquot the Nucleoside diphosphate kinase B antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw

cycles.