

NME7 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8084a**Specification**

NME7 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9Y5B8](#)**NME7 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 29922**Other Names**

Nucleoside diphosphate kinase 7, NDK 7, NDP kinase 7, nm23-H7, NME7

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8084a](/product/products/AP8084a) was selected from the N-term region of human NME7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NME7 Antibody (N-term) Blocking Peptide - Protein Information**Name** NME7 ([HGNC:20461](#))**Function**

Possesses an intrinsic kinase activity (PubMed: [24807905](http://www.uniprot.org/citations/24807905)). Displays 3'-5' exonuclease activity with a preference for single-stranded DNA (PubMed: [16313181](http://www.uniprot.org/citations/16313181)). Does not seem to have nucleoside diphosphate kinase activity (PubMed: [16313181](http://www.uniprot.org/citations/16313181), PubMed: [24807905](http://www.uniprot.org/citations/24807905)). Microtubule inner protein (MIP) part of the dynein-decorated doublet microtubules (DMTs) in cilia axoneme, which is required for motile cilia beating (PubMed: [36191189](http://www.uniprot.org/citations/36191189)). Functional component of the gamma-tubulin ring complex, implicated in the regulation of the microtubule-nucleating activity of the gamma-tubulin ring complex in centrosomes, in a kinase

activity-dependent manner (PubMed:24807905).

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus. Cytoplasm
Cytoplasm, cytoskeleton, spindle Cytoplasm, cytoskeleton, cilium axoneme. Cytoplasm,
cytoskeleton, flagellum axoneme {ECO:0000250|UniProtKB:Q5E9Y9}. Note=Localizes to
centrosomes through its assembly into gamma-tubulin ring complex. The centrosomal content of
NME7 varies during the cell cycle, being highest in mitosis and lowest in early G1.

Tissue Location

Expressed in airway epithelial cells.

NME7 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

NME7 Antibody (N-term) Blocking Peptide - Images

NME7 Antibody (N-term) Blocking Peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

NME7 Antibody (N-term) Blocking Peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).