10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

NME7 Antibody (N-term) Blocking Peptide - Product Information

Primary 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 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). Displays 3'-5' exonuclease activity with a preference for single- stranded DNA (PubMed:16313181). Does not seem to have nucleoside diphosphate kinase activity (PubMed:16313181, PubMed:24807905). 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). Part of the dynein-decorated doublet microtubules (DMTs) in cilia axoneme, which is required for motile cilia beating (PubMed:<a

href="http://www.uniprot.org/citations/36191189" target="_blank">36191189).

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}. Cell projection, cilium. 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 g 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).