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NME5 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8082c

Specification

NME5 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P56597

NME5 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 8382

Other Names
Nucleoside diphosphate kinase homolog 5, NDK-H 5, NDP kinase homolog 5, Inhibitor of p53-induced apoptosis-beta, IPIA-beta, Testis-specific nm23 homolog, nm23-H5, NME5

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8082c was selected from the Center region of human NME5 . 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.

NME5 Antibody (Center) Blocking Peptide - Protein Information

Name NME5 (HGNC:7853)

Function
Functions as part of axonemal radial spoke complexes that play an important part in the motility of sperm and cilia. Does not seem to have nucleoside diphosphate kinase (NDPK) activity (PubMed:9742940). Confers protection from cell death by BAX and alters the cellular levels of several antioxidant enzymes including GPX5. May play a role in spermiogenesis by increasing the ability of late-stage spermatids to eliminate reactive oxygen species (By similarity). Exhibits a 3'-5' exonuclease activity with a preference for single- stranded DNA, suggesting roles in DNA proofreading and repair (PubMed:16313181).

Cellular Location

Cell projection, cilium {ECO:0000250|UniProtKB:Q99MH5}. Cytoplasm, cytoskeleton, flagellum axoneme {ECO:0000250|UniProtKB:Q99MH5}

Tissue Location
Specifically expressed in testis germinal cells.

NME5 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

NME5 Antibody (Center) Blocking Peptide - Images

NME5 Antibody (Center) 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.

NME5 Antibody (Center) Blocking Peptide - References

Munier, A., et al., Exp. Cell Res. 289(2):295-306 (2003).Munier, A., et al., FEBS Lett. 434(3):289-294 (1998).