

NEK4 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP8076b**Specification**

NEK4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession [P51957](#)
Other Accession [NP_003148](#)

NEK4 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 6787

Other Names

Serine/threonine-protein kinase Nek4, Never in mitosis A-related kinase 4, NimA-related protein kinase 4, Serine/threonine-protein kinase 2, Serine/threonine-protein kinase NRK2, NEK4, STK2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8076b](/product/products/AP8076b) was selected from the C-term region of human NEK4. 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.

NEK4 Antibody (C-term) Blocking Peptide - Protein Information

Name NEK4

Synonyms STK2

Function

Protein kinase that seems to act exclusively upon threonine residues (By similarity). Required for normal entry into proliferative arrest after a limited number of cell divisions, also called replicative senescence. Required for normal cell cycle arrest in response to double-stranded DNA damage.

Cellular Location

Cell projection, cilium. Cytoplasm

Tissue Location

Highest expression in adult heart, followed by pancreas, skeletal muscle, brain, testis, retina, liver, kidney, lung and placenta. Present in most primary carcinomas

NEK4 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

NEK4 Antibody (C-term) Blocking Peptide - Images

NEK4 Antibody (C-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.

NEK4 Antibody (C-term) Blocking Peptide - References

Levedakou, E.N., et al., Oncogene 9(7):1977-1988 (1994). Lu, K.P., et al., Prog Cell Cycle Res 1, 187-205 (1995).