

NEK3 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8075c**Specification**

NEK3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [P51956](#)
Other Accession [NP_002489](#)

NEK3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 4752

Other Names

Serine/threonine-protein kinase Nek3, HSPK 36, Never in mitosis A-related kinase 3, NimA-related protein kinase 3, NEK3

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8075c](/product/products/AP8075c) was selected from the Center region of human NEK3. 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.

NEK3 Antibody (Center) Blocking Peptide - Protein Information

Name NEK3

Function

Protein kinase which influences neuronal morphogenesis and polarity through effects on microtubules. Regulates microtubule acetylation in neurons. Contributes to prolactin-mediated phosphorylation of PXN and VAV2. Implicated in prolactin-mediated cytoskeletal reorganization and motility of breast cancer cells through mechanisms involving RAC1 activation and phosphorylation of PXN and VAV2.

Cellular Location

Cytoplasm. Cell projection, axon

Tissue Location

Up-regulated in malignant versus normal breast tissue. Isoform 2 shows a high level of expression in testis, ovary and brain.

NEK3 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

NEK3 Antibody (Center) Blocking Peptide - Images

NEK3 Antibody (Center) Blocking Peptide - Background

In *Aspergillus nidulans*, lack of the serine/threonine kinase NimA (never in mitosis A) results in cell cycle arrest in G2, while overexpression causes the premature onset of mitotic events. NEK3 is similar in sequence to the *Aspergillus nidulans* protein and may therefore play a role in mitotic regulation. However, the encoded protein differs from other NimA family members in that it is not cell cycle regulated and is found primarily in the cytoplasm.

NEK3 Antibody (Center) Blocking Peptide - References

Schultz, S.J., et al., Cell Growth Differ. 5(6):625-635 (1994). Schultz, S.J., et al., Cell Growth Differ. 4(10):821-830 (1993). Kimura, M., et al., Cytogenet. Cell Genet. 95 (3-4), 177-182 (2001).