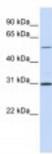




## NEK3 Antibody

CATALOG NUMBER: 26-375



Antibody used in WB on Human HeLa at  
0.2-1 ug/ml.

### Specifications

**SPECIES REACTIVITY:**

**TESTED APPLICATIONS:**

**APPLICATIONS:** NEK3 antibody can be used for detection of NEK3 by ELISA at 1:1562500. NEK3 antibody can be used for detection of NEK3 by western blot at 1 ug/mL, and HRP conjugated secondary antibody should be diluted 1:50,000 - 100,000.

**USER NOTE:** Optimal dilutions for each application to be determined by the researcher.

**POSITIVE CONTROL:** 1) Cat. No. 1201 - HeLa Cell Lysate

**PREDICTED MOLECULAR WEIGHT:** 58 kDa

**IMMUNOGEN:** Antibody produced in rabbits immunized with a synthetic peptide corresponding a region of human NEK3.

**HOST SPECIES:** Rabbit

### Properties

**PURIFICATION:** Antibody is purified by peptide affinity chromatography method.

**PHYSICAL STATE:** Lyophilized

**BUFFER:** Antibody is lyophilized in PBS buffer with 2% sucrose. Add 50 uL of distilled water. Final antibody concentration is 1 mg/mL.

**CONCENTRATION:** 1 mg/ml

**STORAGE CONDITIONS:** For short periods of storage (days) store at 4°C. For longer periods of storage, store NEK3 antibody at -20°C. As with any antibody avoid repeat freeze-thaw cycles.

**CLONALITY:** Polyclonal

**CONJUGATE:** Unconjugated

### Additional Info

**ALTERNATE NAMES:** NEK3, HSPK36, MGC29949

**ACCESSION NO.:** NP\_002489

**PROTEIN GI NO.:** 23510391

**OFFICIAL SYMBOL:** NEK3

**GENE ID:** 4752

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### Background

**BACKGROUND:** NEK3 is a member of the NimA (never in mitosis A) family of serine/threonine protein kinases. It differs from other NimA family members in that it is not cell cycle regulated and is found primarily in the cytoplasm. The kinase is activated by prolactin stimulation, leading to phosphorylation of VAV2 guanine nucleotide exchange factor, paxillin, and activation of the RAC1 GTPase. 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. The protein encoded by this gene 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. Three transcript variants have been found for this gene, but the full-length nature of only two of them has been characterized.

**REFERENCES:** 1) Miller, S.L., (2007) *Oncogene* 26 (32), 4668-4678.

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**FOR RESEARCH USE ONLY**

December 12, 2016