

## Recombinant Human NEK2, His-tagged

**Cat. No.** NEK2-558H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human NEK2 was expressed by <i>baculovirus in Sf9 insect cells</i> using an N-terminal His tag. MW=53kDa.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>Description</b>	NEK 2 is closely related in its catalytic domain to the serine/threonine protein kinase NIMA of <i>Aspergillus nidulans</i> that is required for entry into mitosis and may function in parallel to the universal mitotic inducer p34cdc2. Like NIMA, the NEK2 protein is almost undetectable during G1 but accumulated progressively throughout S, reaching maximal levels in late G2. NEK2 is shown to be expressed most abundantly in the testis of the adult tissues examined being localized to the nucleus.
<b>Purity</b>	>70 % by SDS-Page.
<b>Specific Activity</b>	100 U/mg. One unit is defined as the amount of enzyme that will phosphorylate 1 nmol of myelin basic protein (MBP) substrate per minute at pH 7.4 and 30°C. Assay buffer: 50 mM HEPES, pH 7.4, 3 mM MgCl <sub>2</sub> , 3 mM MnCl <sub>2</sub> , 1 mM DTT, 3 uM Naorthovanadate, 0.5 mM ATP, 0.3 mg/ml MBP substrate, and 0.2 ug/ml NEK2.
<b>Application</b>	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.
<b>Formulated In</b>	25 mM Tris-HCl, pH 8.0, 100 mM NaCl, 0.05% Tween-20, 40% glycerol, and 1 mM DTT.

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**Stability** >6 months at –80°C.

## GENE INFORMATION

**Gene Name** NEK2 NIMA (never in mitosis gene a)-related kinase 2 [ Homo sapiens ]

**Synonyms** NEK2; NIMA (never in mitosis gene a)-related kinase 2; NLK1; NEK2A; HsPK21; NIMA-related kinase 2; EC 2.7.11.1

**Gene ID** 4751

**mRNA Refseq** NM\_002497

**Protein Refseq** NP\_002488

**MIM** 604043

**UniProt ID** P51955

**Chromosome Location** 1q32.2-q41

**Pathway** Cell Cycle, Mitotic

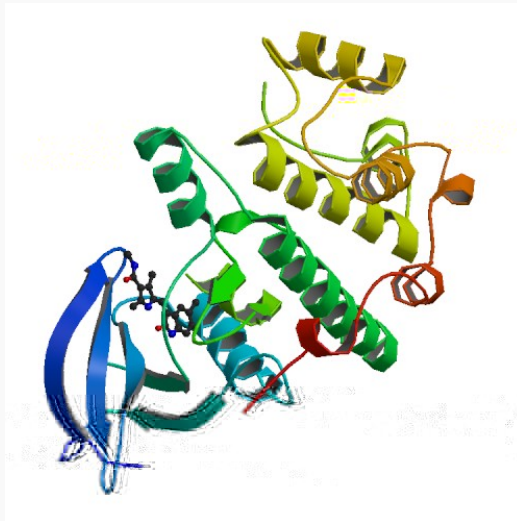
**Function** ATP binding; magnesium ion binding; transferase activity; nucleotide binding; protein phosphatase binding; protein serine/threonine kinase activity

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