

Recombinant Human NEK2, His-tagged

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

SPECIFICATION

Product Overview	Recombinant human NEK2 was expressed by <i>baculovirus in Sf9 insect cells</i> using an N-terminal His tag. MW=53kDa.
Species	Human
Source	Sf9 Cells
Description	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.
Purity	>70 % by SDS-Page.
Specific Activity	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 ₂ , 3 mM MnCl ₂ , 1 mM DTT, 3 uM Naorthovanadate, 0.5 mM ATP, 0.3 mg/ml MBP substrate, and 0.2 ug/ml NEK2.
Application	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.
Formulated In	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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