Active Recombinant Human NEK9, GST-tagged

Cat. No. NEK9-1064H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human NEK9 (1-979; deleted fragment of 346-731) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Sf9 Cells
ProteinLength	1-979; deleted fragment of 346-731
Description	NEK9 is a member of the NEK family and has high homology to NEK1, NEK3 and NEK4. NEK9 is activated during mitosis and binds specifically to RAN GTPase and is a substrate for CDC2 phosphorylation. NEK9 plays a role in the control of mitotic progression and is regulated by CDC2 and RAN GTPase. Overexpression of both active and inactive variants of NEK9 is toxic to cells and inhibits cell division causing abnormal nuclear morphologies. NEK9 can catalyze the phosphorylation of recombinant NEK6 and NEK7 in vitro leading to its activation. This suggests that NEK9 may be responsible for activation of NEK6 and NEK7 during mitosis.
Form	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, 25% glycerol.
Bio-activity	120 nmol/min/mg
Molecular Mass	~115 kDa

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	>75%
Applications	Kinase Assay; Western Blot
Stability	1 yr at -70oC from date of shipment.
Storage	Store product at –70oC. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Concentration	0.1 ug/ul

GENE INFORMATION

Gene Name	NEK9 NIMA (never in mitosis gene a)- related kinase 9 [Homo sapiens]
Official Symbol	NEK9
Synonyms	NEK9; NIMA (never in mitosis gene a)- related kinase 9; serine/threonine-protein kinase Nek9; DKFZp434D0935; MGC16714; Nek8; NERCC; nercc1 kinase; nimA-related kinase 8; NIMA-related kinase Nek8; nimA-related protein kinase 9; never in mitosis A-related kinase 9; NERCC1; MGC138306
Gene ID	91754
mRNA Refseq	NM_033116
Protein Refseq	NP_149107
MIM	609798

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	Q8TD19
Chromosome Location	14q24.2
Pathway	Activation of NIMA Kinases NEK9, NEK6, NEK7; Mitotic Prophase; Nuclear Pore Complex (NPC) Disassembly
Function	ATP binding; metal ion binding; protein kinase binding; protein serine/threonine kinase activity

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA