Recombinant Mouse NEK3 Protein (His & GST Tag)

Catalog No. PKSM040293

Note: Centrifuge before opening to ensure complete recovery of vial contents.

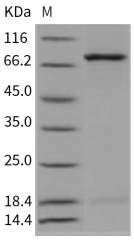
Description

Synonyms	NEK3
Species	Mouse
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Ala 509
Accession	ABK42288.1
Calculated Molecular Weight	84.8 kDa
Observed molecular weight	72 kDa
Tag	N-His-GST
Bioactivity	The specific activity was determined to be 8 nmol/min/mg using MBP as substrate.

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as sterile solution of 20mM Tris, 500mM NaCl, pH 8.0, 10% glycerol
Reconstitution	Not Applicable

Data



> 90 % as determined by reducing SDS-PAGE.

Background

NEK3 (NIMA (never in mitosis gene a)-related expressed kinase 3), contains 1 protein kinase domain and is a member of the NimA (never in mitosis A) family of serine/threonine protein kinases. Members of the NEK family of protein kinases share high amino acid homology with NIMA (never in mitosis gene a). NEK3 differs from other NimA family members in that it is not cell cycle regulated and is found primarily in the cytoplasm. It is activated by prolactin stimulation, leading to phosphorylation of VAV2 guanine nucleotide exchange factor, paxillin, and activation of the RAC1 GTPase. NEK3 mRNA can be detected in all the proliferating cell lines with the amount not changing during the cell cycle. Prolactin

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stimulates interaction between NEK3 and paxillin leading to increased paxillin phosphorylation, Analysis of breast tissue microarrays show a significant up-regulation of NEK3 expression in malignant versus normal specimens. Multiple transcript variants encoding different isoforms have been found for NEK3 gene. NEK3 may play a role in mitotic regulation.

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