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Datasheet for ABIN7317545

NEK7 Protein (NEK7) (GST tag,His tag)

Overview

Quantity:	50 µg
Target:	NEK7
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NEK7 protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human NEK7 Protein (His & GST Tag)
Sequence:	Met 1-Ser 302
Characteristics:	A DNA sequence encoding the human NEK7 (NP_598001.1) (Met1-Ser 302) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	NEK7
Alternative Name:	NEK7 (NEK7 Products)
Background:	Background: NIMA (never in mitosis gene a)-related kinase 7, NEK7 belongs to the NIMA subfamily, NEK Ser/Thr protein kinase family, protein kinase superfamily. NEKs (NIMA-related kinases) are mammalian serine/threonine (Ser/Thr) protein kinases structurally related to

Target Details

Aspergillus NIMA (Never in Mitosis, gene A), which plays essential roles in mitotic signaling. NEKs share an amino-terminal catalytic domain related to NIMA, an Aspergillus kinase involved in the control of several aspects of mitosis, and divergent carboxyl-terminal tails of varying length. NEKs are commonly referred to as mitotic kinases, although a definitive in vivo verification of this definition is largely missing. Reduction in the activity of NEK7 or its close paralog, NEK6, has previously been shown to arrest cells in mitosis, mainly at metaphase. NEK7 is a regulator of cell division, and reveal it as an essential component for mammalian growth and survival. The intimate connection between tetraploidy, aneuploidy and cancer development suggests that NEK7 deregulation can induce oncogenesis. The endogenous NEK7 protein is enriched at the centrosome in a microtubule-independent manner. Overexpression of wt or kinase-defective NEK7 resulted in cells of rounder appearance, and higher proportions of multinuclear and apoptotic cells.

Synonym: NEK7

Molecular Weight: 62.4 kDa

NCBI Accession: [NP_598001](#)

Pathways: [Inflammasome](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 50 mM Tris, 100 mM NaCl, pH 8.5, 0.5 mM Reduced Glutathione, 0.5 mM PMSF

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.