

# **NEK2** Rabbit mAb [CFor]

Cat NO. :A17041

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB	Human	P51955	48/44kDa	Rabbit	IgG	50ul,100ul,200ul

Applications detail:

Application

WB

1:1000-2000

The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Affinity-chromatography

## Specificity:

Antibody is produced by immunizing animals with A synthesized peptide derived from human NEK2

### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

Products are valid for one natural year of receipt. Avoid repeated freeze / thaw cycles.

## Tissue specificity:

Isoform 1 and isoform 2 are expressed in peripheral blood T-cells and a wide variety of transformed cell types.

Isoform 1 and isoform 4 are expressed in the testis. Up-regulated in various cancer

## Subcellular location:

[Isoform 1]: Nucleus. Nucleus, nucleolus. Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle pole. Chromosome, centromere, kinetochore.

## Function:

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

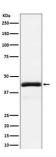
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



Protein kinase which is involved in the control of centrosome separation and bipolar spindle formation in mitotic cells and chromatin condensation in meiotic cells. Regulates centrosome separation (essential for the formation of bipolar spindles and high-fidelity chromosome separation) by phosphorylating centrosomal proteins such as CROCC, CEP250 and NINL, resulting in their displacement from the centrosomes. Regulates kinetochore microtubule attachment stability in mitosis via phosphorylation of NDC80. Involved in regulation of mitotic checkpoint protein complex via phosphorylation of CDC20 and MAD2L1. Plays an active role in chromatin condensation during the first meiotic division through phosphorylation of HMGA2. Phosphorylates: PPP1CC,SGO1,NECAB3 and NPM1. Essential for localization of MAD2L1 to kinetochore and MAPK1 and NPM1 to the centrosome. Phosphorylates CEP68 and CNTLN directly or indirectly (PubMed:24554434). NEK2-mediated phosphorylation of CEP68 promotes CEP68 dissociation from the centrosome and its degradation at the onset of mitosis (PubMed:25704143). Involved in the regulation of centrosome disjunction (PubMed:26220856)..., [Isoform 1]: Phosphorylates and activates NEK11 in G1/S-arrested cells..., [Isoform 2]: Not present in the nucleolus and, in contrast to isoform 1, does not phosphorylate and activate NEK11 in G1/S-arrested cells...

### **Validation Data:**

### NEK2 Rabbit mAb [CFor] Images



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