



## Rabbit Anti-phospho-Nudel (Thr245) antibody

SL4398R

<b>Product Name:</b>	phospho-Nudel (Thr245)
<b>Chinese Name:</b>	磷酸化中心粒蛋白Nudel抗体
<b>Alias:</b>	A. nidulans; DKFZp451M0318; ENDOOLIGOPEPTIDASE A; EOPA; MITAP 1; MITAP1; Mitosin associated protein 1; Mitosin associated protein MITAP1; Mitosin-associated protein 1; Ndel 1; Ndel1; NDEL1_HUMAN; Nuclear distribution gene E like homolog 1; Nuclear distribution protein nudeE like 1; Nuclear distribution protein nudeE-like 1; NUDE like protein; NudE nuclear distribution gene E homolog like 1 A. nidulans; NudE nuclear distribution gene E homolog like 1; NUDEL; Protein Nudel.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	38kDa
<b>Cellular localization:</b>	cytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthesised phosphopeptide derived from human Nudel around the phosphorylation site of Thr245:PL(p-T)PS
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>

**Product Detail:**

This gene encodes a coiled-coil protein that plays a role in multiple processes including cytoskeletal organization, cell signaling and neuron migration, outgrowth and maintenance. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene, and a pseudogene of this gene is located on the long arm of chromosome X. [provided by RefSeq, Mar 2012]

**Function:**

Required for organization of the cellular microtubule array and microtubule anchoring at the centrosome. May regulate microtubule organization at least in part by targeting the microtubule severing protein KATNA1 to the centrosome. Also positively regulates the activity of the minus-end directed microtubule motor protein dynein. May enhance dynein-mediated microtubule sliding by targeting dynein to the microtubule plus ends. Required for several dynein- and microtubule-dependent processes such as the maintenance of Golgi integrity, the centripetal motion of secretory vesicles and the coupling of the nucleus and centrosome. Also required during brain development for the migration of newly formed neurons from the ventricular/subventricular zone toward the cortical plate. Plays a role, together with DISC1, in the regulation of neurite outgrowth. Required for mitosis in some cell types but appears to be dispensible for mitosis in cortical neuronal progenitors, which instead requires NDE1. Facilitates the polymerization of neurofilaments from the individual subunits NEFH and NEFL.

**Subcellular Location:**

Cytoplasm > cytoskeleton. Cytoplasm > cytoskeleton > centrosome. Chromosome > centromere > kinetochore. Cytoplasm > cytoskeleton > spindle. Localizes to the cell body of the motor neurons and colocalizes with assembled neurofilaments within axonal processes. Localizes to the microtubules of the manchette in elongated spermatids. Colocalizes with DISC1 in the perinuclear region, including the centrosome (By similarity). Localizes to the interphase centrosome and the mitotic spindle. Localizes to the kinetochore in a CENPF-dependent manner.

**Tissue Specificity:**

Expressed in brain, heart, kidney, liver, lung, pancreas, placenta and skeletal muscle.

**Post-translational modifications:**

Phosphorylated in mitosis. Can be phosphorylated by CDK1, CDK5 and MAPK1. Phosphorylation by CDK5 promotes interaction with KATNA1 and YWHAE.

**DISEASE:**

Expression peaks in mitosis.

**Similarity:**

Belongs to the nudeE family.

**SWISS:**

Q9GZM

**Gene ID:**  
81565

**Database links:**

[Entrez Gene: 81565](#)Human

[Entrez Gene: 83431](#)Mouse

[Entrez Gene: 170845](#)Rat

[Omim: 607538](#)Human

[SwissProt: Q9GZM8](#)Human

[SwissProt: Q9ERR1](#)Mouse

[SwissProt: Q78PB6](#)Rat

[Unigene: 372123](#)Human

[Unigene: 31979](#)Mouse

[Unigene: 2947](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.