

**NUDEL Antibody**  
**Rabbit mAb**  
**Catalog # AP91908****Specification**

---

**NUDEL Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O9GZM8</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
EOPA; MITAP1; NDEL1; NUDEL;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	38375 Da

**NUDEL Antibody - Additional Information**

Dilution	WB~~1:1000 IHC~~1:100~500
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human NUDEL
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**NUDEL Antibody - Protein Information****Name** NDEL1**Synonyms** EOPA, MITAP1, NUDEL**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 dispensable for mitosis in cortical neuronal progenitors, which instead requires NDE1. Facilitates the polymerization of neurofilaments from the individual subunits NEFH and NEFL. Positively regulates lysosome peripheral distribution and ruffled border formation in osteoclasts (By similarity). Plays a role, together with DISC1, in the regulation of neurite outgrowth (By similarity). May act as a RAB9A/B effector that tethers RAB9-associated late endosomes to the dynein motor for their retrograde transport to the trans-Golgi network (PubMed:<a href="http://www.uniprot.org/citations/34793709" target="\_blank">34793709</a>).

#### **Cellular Location**

Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Note=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 Location**

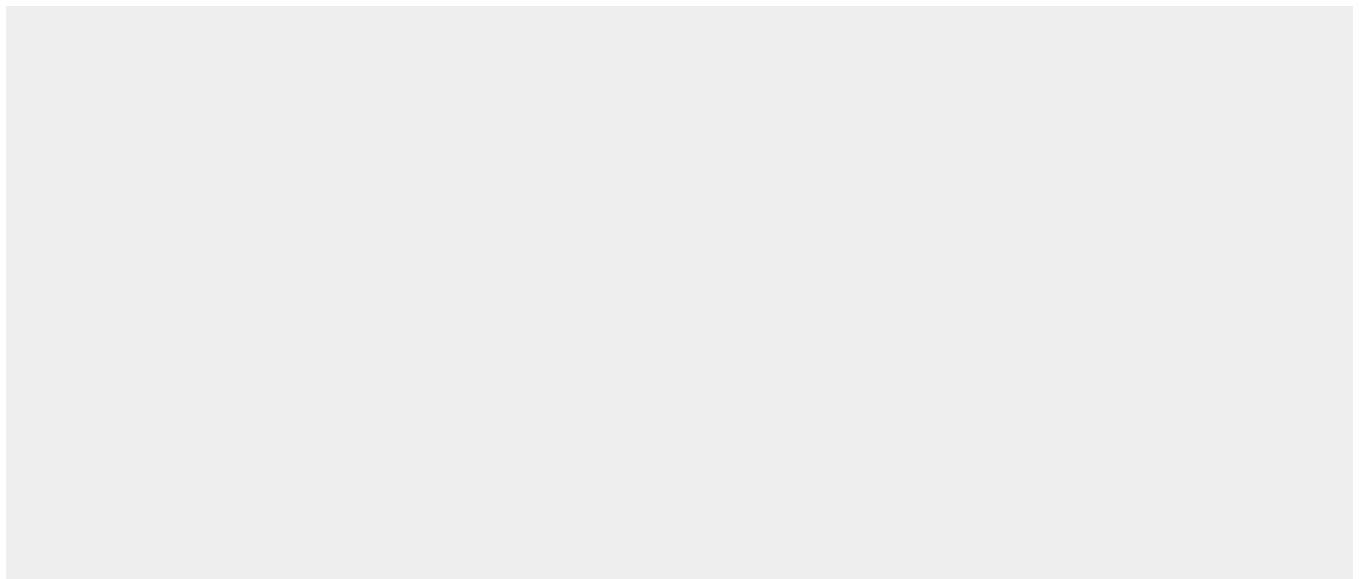
Expressed in brain, heart, kidney, liver, lung, pancreas, placenta and skeletal muscle.

#### **NUDEL Antibody - Protocols**

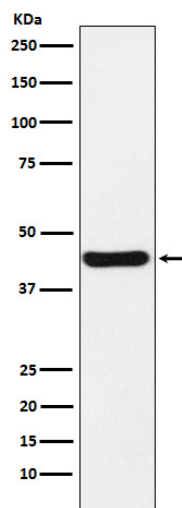
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **NUDEL Antibody - Images**







Western blot analysis of NUDEL expression in HeLa cell lysate.