

NDEL1 Rabbit mAb

Catalog # AP76607

Product Information

Application WB
Primary Accession Q9GZM8

Reactivity Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 38375

Additional Information

Gene ID 81565

Other Names NDEL1

Dilution WB~~1/500-1/1000

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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 dispensible 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:34793709).

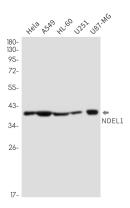
Cellular Location

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.

Images



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