



Anti-NDEL1 monoclonal antibody, clone 2H21 (DCABH-850)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Product Overview | Mouse monoclonal to Nudel |
| Antigen 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. 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. |
| Immunogen | Recombinant full length Human Nudel produced in HEK293T cells (NP_001020750). |
| Isotype | IgG2b |
| Source/Host | Mouse |
| Species Reactivity | Rat, Dog, Human, Monkey |
| Clone | 2H21 |
| Purification | This antibody is purified from Mouse ascites fluid by affinity chromatography. |
| Conjugate | Unconjugated |
| Applications | WB, Flow Cyt |

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| Positive Control | HEK293T cell lysate transfected with pCMV6-ENTRY Nudel; HepG2, SVT2, COS7, Jurkat, MDCK, PC12 and MCF7 cell extracts; HEK293T cells transfected with pCMV6-ENTRY Nudel overexpress plasmid; Jurkat cells. |
| Format | Liquid |
| Size | 100 µl |
| Buffer | pH: 7.30; Preservative: 0.02% Sodium azide; Constituents: 50% Glycerol, 1% BSA, 48% PBS |
| Preservative | 0.02% Sodium Azide |
| Storage | store at -20°C. Avoid repeated freeze / thaw cycles. |
| Ship | Shipped at 4°C. |

GENE INFORMATION

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| Gene Name | NDEL1 nudE nuclear distribution E homolog (A. nidulans)-like 1 [Homo sapiens] |
| Official Symbol | NDEL1 |
| Synonyms | NDEL1; nudE nuclear distribution E homolog (A. nidulans)-like 1; nudE nuclear distribution gene E homolog (A. nidulans) like 1; nuclear distribution protein nudE-like 1; MITAP1; NUDEL; protein Nudel; endooligopeptidase A; mitotin-associated protein 1; mit |
| Entrez Gene ID | 81565 |
| Protein Refseq | NP_001020750 |
| UniProt ID | Q9GZM8 |
| Chromosome Location | 17p13.1 |
| Pathway | Aurora A signaling, organism-specific biosystem; Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; DNA Replication, organism-specific biosystem; Lissencephaly gene (LIS1) in neuronal migration and development, organism-specific biosystem; M Phase, organism-specific biosystem; Mitotic M-M/G1 phases, organism-specific biosystem; |
| Function | alpha-tubulin binding; beta-tubulin binding; microtubule binding; oligopeptidase activity; protein binding; |