

NDE1 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP8800a

Specification

NDE1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9NXR1</u>

NDE1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 54820

Other Names Nuclear distribution protein nudE homolog 1, NudE, NDE1, NUDE

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8800a was selected from the N-term region of human NDE1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NDE1 Antibody (N-term) Blocking Peptide - Protein Information

Name NDE1 (<u>HGNC:17619</u>)

Synonyms NUDE

Function

Required for centrosome duplication and formation and function of the mitotic spindle. Essential for the development of the cerebral cortex. May regulate the production of neurons by controlling the orientation of the mitotic spindle during division of cortical neuronal progenitors of the proliferative ventricular zone of the brain. Orientation of the division plane perpendicular to the layers of the cortex gives rise to two proliferative neuronal progenitors whereas parallel orientation of the division plane yields one proliferative neuronal progenitor and a postmitotic neuron. A premature shift towards a neuronal fate within the progenitor population may result in an overall reduction in the final number of neurons and an increase in the number of neurons in the deeper layers of the cortex. Acts 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. Cleavage furrow Cytoplasmic vesicle membrane Note=Localizes to the interphase and S phase centrosome. During mitosis, partially associated with the mitotic spindle. Concentrates at the plus ends of microtubules coincident with kinetochores in metaphase and anaphase in a CENPF-dependent manner. Also localizes to the cleavage furrow during cytokinesis. manner. Also localizes to the cleavage furrow during cytokinesis. Colocalizes with RAB9A to membrane vesicles (PubMed:34793709).

Tissue Location

Expressed in the neuroepithelium throughout the developing brain, including the cerebral cortex and cerebellum

NDE1 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

NDE1 Antibody (N-term) Blocking Peptide - Images

NDE1 Antibody (N-term) Blocking Peptide - Background

NDE1 is required for centrosome duplication. It is essential for the development of the cerebral cortex. It may regulate the production of neurons by controlling the orientation of the mitotic spindle during division of cortical neuronal progenitors of the proliferative ventricular zone of the brain. Orientation of the division plane perpendicular to the layers of the cortex gives rise to two proliferative neuronal progenitors whereas parallel orientation of the division plane yields one proliferative neuronal progenitor and a post-mitotic neuron. A premature shift towards a neuronal fate within the progenitor population may result in an overall reduction in the final number of neurons and an increase in the number of neurons in the deeper layers of the cortex (By similarity). This protein is required for formation and function of the mitotic spindle.

NDE1 Antibody (N-term) Blocking Peptide - References

Mayya V., et.al., Sci. Signal. 2:RA46-RA46(2009).