

Product datasheet

Anti-Nudel (phospho T245) antibody ab60006

1 References 1 Image

Overview

Product name	Anti-Nudel (phospho T245) antibody
Description	Rabbit polyclonal to Nudel (phospho T245)
Host species	Rabbit
Tested applications	Suitable for: IHC-Fr, ELISA, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic phosphopeptide corresponding to amino acid residues surrounding T245 of human Nudel conjugated to KLH
Positive control	Human breast carcinoma tissue.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
Storage buffer	Preservative: 0.09% Sodium Azide Constituents: PBS
Purity	Protein G purified
Purification notes	ab60006 is first purified by protein G affinity chromatography. Then, the antibody fraction is peptide affinity purified in a 2 step procedure with the control and phosphorylated peptides. The phospho specific antibody is eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab60006** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr		Use at an assay dependent concentration. PubMed: 24785679
ELISA		1/1000.
IHC-P		1/50 - 1/100.

Target

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.

Tissue specificity

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

Sequence similarities

Belongs to the nudE family.

Developmental stage

Expression peaks in mitosis.

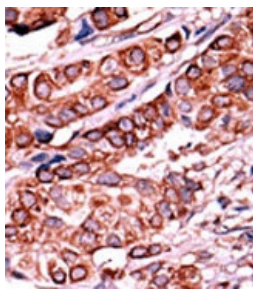
Post-translational modifications

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

Cellular localization

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.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Nudel (phospho T245) antibody (ab60006)

ab60006 at 1/50 dilution staining Nudel in Human breast carcinoma by Immunohistochemistry, Formalin-fixed, Paraffin-embedded tissue. The primary antibody was peroxidase conjugated to the secondary antibody, followed by AEC staining.

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