

Product datasheet

Recombinant Human NDEL1 protein ab183232

1 Image

Description

Product name	Recombinant Human NDEL1 protein
Purity	> 80 % SDS-PAGE.
Expression system	Escherichia coli
Accession	Q9GZM8
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human

Sequence	<p>MGSSHHHHHH SSSLVPRGSH MGSMDGEDIP DFSSLKEETA YWKELSLKYK QSFQEARDEL VEFQEGSREL EAELEAQLVQ AEQRNRDLQA DNQRLKYEVE ALKEKLEHQY AQS YKQVSVL EDDL SQTRAI KEQLHKYVRE LEQANDDLER AKRATVSLE DFEQRLNQAI ERNAFLESEL DEKESLLVSV QRLKDEARDL RQELAVRERQ QEVTRKSAPS SPTLDCEKMD SAVQASLSLP ATPVGKGTEN TFPSPKAIPN GFGTSPLTPS ARISALNVG DLLRKVGALE SKLAACRNFA KDQASRKS YI SGNVNCGVLN GNGTKFSRSG HTSFFDKGQE KVIFPTLFMG Q</p>
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Predicted molecular weight	39 kDa including tags
Amino acids	1 to 328
Tags	His tag N-Terminus
Additional sequence information	NP_001020750

Specifications

Our [Abpromise guarantee](#) covers the use of **ab183232** in the following tested applications.

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

Applications	SDS-PAGE
	Mass Spectrometry

Mass spectrometry	MALDI-TOF
Form	Liquid
Additional notes	This product was previously labelled as Nudel

Preparation and Storage

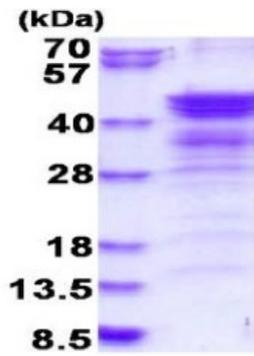
Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.0 Constituents: 0.32% Tris HCl, 0.88% Sodium chloride, 10% Glycerol, 0.02% DTT
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General Info

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.
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 YWHAЕ.
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

15% SDS-PAGE analysis of ab183232 (3µg)



SDS-PAGE - Recombinant Human NDEL1 protein
(ab183232)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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