For Research Use Only

## NDE1 Recombinant antibody, PBS Only (Detector)

Catalog Number:84799-4-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

242340H4

**Basic Information** 

Catalog Number: GenBank Accession Number: 84799-4-PBS BC001421

 Concentration:
 GeneID (NCBI):

 1 mg/ml
 54820

 Source:
 UNIPROT ID:

 Rabbit
 Q9NXR1

Rabbit Q9NXR1
Isotype: Full Name:

IgG nudE nuclear distribution gene E Immunogen Catalog Number: homolog 1 (A. nidulans)

AG0336 Calculated MW:

335 aa, 38 kDa Observed MW: 40 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, Cytometric bead array, Sandwich

ELISA, Indirect ELISA, Sample test

Species Specificity: human, mouse, rat

**Background Information** 

NDE1 (NUDE / NUDE1) is a LIS1-interacting protein. A signaling pathway containing NDE1, LIS1, and cytoplasmic dynein is conserved for eukaryotic nuclear migration and has profound impact on neuronal migration during development of the central nervous system. LIS1 and dynein have been shown to be involved in mitosis and NDE1 participates in a subset of dynein function in M phase. NDE1 is specifically phosphorylated in M phase in its serine/threonine phosphorylation motifs, probably by Cdc2 and also Erk1 and Erk2. A fraction of NDE1 binds to centrosomes strongly in interphase and is localized to mitotic spindles in early M phase. Phosphorylation of NDE1 also regulates the cell-cycle-dependent distribution, possibly by increasing its dissociation rate at the microtubule-organizing center.

Storage

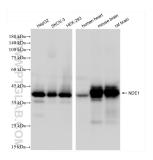
Storage:

Store at -80°C.

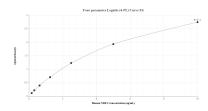
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

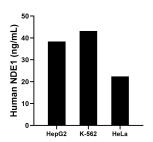
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 84799-4-RR (NDE1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84799-4-PBS in a different storage buffer formulation.



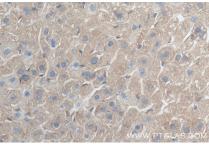
Sandwich ELISA standard curve of MP01589-1, Human NDE1 Recombinant Matched Antibody Pair-PBS only. 84799-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag0336. 84799-4-PBS was HRP conjugated as the detection antibody. Range: 0.156-10 ne/mL



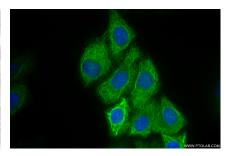
The mean NDE1 concentration was determined to be 38.38 ng/mL in HepG2 cell extract based on a 2.50 mg/mL extract load, 43.20 ng/mL in K-562 cell extract based on a 1.00 mg/mL extract load and 22.42 ng/mL in Hela cell extract based on a 1.50 mg/mL extract load.



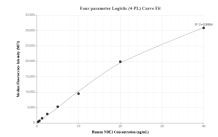
Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 84799-4-RR (NDE1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84799-4-PBS in a different storage buffer formulation.



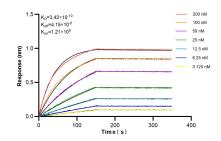
Immunohistochemical analysis of paraffinembedded mouse liver tissue slide using 84799-4-RR (NDE1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84799-4-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using NDE1 antibody (84799-4-RR, Clone: 242340H4) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84799-4-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01589-1, NDE1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84799-2-PBS. Detection antibody: 84799-4-PBS. Standard: Ag0336. Range: 0.313-40 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84799-4-RR against Human NDE1 were performed. The affinity constant is 0.342 nM.