For Research Use Only

NBN / NBS1 Polyclonal antibody

Catalog Number:55025-1-AP

Featured Product

15 Publications



| Basic Information | Catalog Number: 55025-1-AP | GenBank Access NM_002485 | sion Number: | Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:500-1:2400 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:500-1:2000 IF/ICC 1:500-1:2000 | |
|------------------------|---|---|---|--|--|
| | Concentration: 400 ug/ml | GenelD (NCBI): 4683 | | | |
| | Source: Rabbit | UNIPROT ID: O 60934 | | | |
| | Isotype: IgG | Full Name: nibrin | | | |
| | | Calculated MW 85 kDa | | | |
| | | Observed MW: 90-95 kDa | | | |
| Applications | Tested Applications: WB. IHC. IF/ICC. IP. ELISA | ons: Positive Controls: IP, ELISA Marcula colla control de la control de | | | |
| | Cited Applications: | | WB : HeLa cells, human testis tissue IP : HeLa cells, IHC : human stomach tissue, | | |
| | WB, IF, IP, CoIP | | | | |
| | human, mouse, rat | use, rat IF/ICC : A | | 1549 cells, | |
| | Cited Species: human, mouse, rat | | | | |
| | Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | | | | |
| Background Information | NBN, also named as NBS, NBS1 and P95, is a component of the MRE11/RAD50/NBN (MRN complex) which plays a critical role in the cellular response to DNA damage and the maintenance of chromosome integrity. The complex is involved in double-strand break (DSB) repair, DNA recombination, maintenance of telomere integrity, cell cycle checkpoint control and meiosis. The complex possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity, which are provided by MRE11A. NBN modulate the DNA damage signal sensing by recruiting Pl3/Pl4-kinase family members ATM, ATR, and probably DNA-PKcs to the DNA damage sites and activating their functions. NBN also functions in telomere length maintenance by generating the 3' overhang which serves as a primer for telomerase dependent telomere elongation. NBN is a major player in the control of intra-S-phase checkpoint and there is some evidence that NBN is involved in G1 and G2 checkpoints. Defects in NBN are the cause of Nijmegen breakage syndrome (NBS). Defects in NBN are a cause of genetic susceptibility to breast cancer (BC). Defects in NBN may be associated with aplastic anemia. Defects in NBN might play a role in the pathogenesis of childhood acute lymphoblastic leukemia (ALL). The antibody is specific to NBN. The full-length NBN protein, with an apparent molecular weight of 95 kDa and the two protein fragments of 26 and 70 kDa arising from the c.657_661del5 (p.K219fsX19) mutation, and the 80 kDa protein found in patient RR with the mutation c.742_743insGG leading to excision of exons 6 and 7 from the NBN mRNA are shown. (PMID: 26265251) The predicted molecular weight of NBN protein (p95) is 85kDa, actually detection result is about 95kDa(PMID: 23762398). | | | | |
| Notable Publications | Author | Pubmed ID | Journal | Application | |
| | Tao Zhang | 36050397 | Nat Commun | WB | |
| | Mikio Shimada | 31665364 | J Radiat Res | WB | |
| | Yongtai Bai | 31353207 | Mol Cell | WB | |
| Storage | Storage: Store at -20°C. Stable for one Storage Buffer: PBS with 0.02% sodium azic Aliquoting is unnecessary for | e year after shipment. Je and 50% glycerol, pH7. or -20°C storage | 3 | | |

 For technical support and original validation data for this product please contact:

 T: 4006900926
 E: Proteintech-CN@ptglab.com
 W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



HeLa cells were subjected to SDS PAGE followed by western blot with 55025-1-AP (NBS1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



IP result of anti-NBN / NBS1 (IP:55025-1-AP, 4ug; Detection:55025-1-AP 1:3000) with HeLa cells lysate 1320 ug.



WB result of NBN / NBS1 antibody (55025-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NBN / NBS1 transfected HeLa cells.



Immunofluorescent analysis of (4% PFA) fixed A549 cells using NBN / NBS1 antibody (55025-1-AP) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffinembedded human stomach tissue slide using 55025-1-AP (NBN / NBS1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human stomach tissue slide using 55025-1-AP (NBN / NBS1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).