

À des fins de recherche uniquement

Anticorps Monoclonal anti-NBN

Numéro de catalogue: CL594-66980



Informations de base

Numéro de catalogue: CL594-66980	Numéro d'acquisition GenBank: BC136803	Méthode de purification: Purification par protéine A
Taille: 100ul, Concentration: 1000 µg/ml by Nanodrop;	Identification du gène (NCBI): 4683	CloneNo.: 1E11E10
Hôte: Mouse	Nom complet: nibrin	Dilutions recommandées: IF 1:50-1:500
Isotype: IgG2a	MW calculé: 85 kDa	Excitation/Emission maxima wavelengths: 588 nm / 604 nm
Immunogen Catalog Number: AG19320	MW observés: 95 kDa	

Applications

Applications testées: FC (Intra), IF	Contrôles positifs: IF : cellules HepG2,
Spécificité de l'espèce: Humain	

Informations générales

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 PI3/PI4-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).

Stockage

Stockage:
Stocker à -20 °C. Éviter toute exposition à la lumière. Stable pendant un an après l'expédition.
Tampon de stockage:
PBS avec glycérol à 50 %, Proclin300 à 0,05 % et BSA à 0,5 %, pH 7,3.
L'aliquotage n'est pas nécessaire pour le stockage à -20C

*** Les 20ul contiennent 0,1% de BSA.

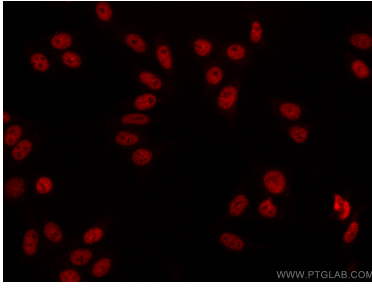
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free
in USA), or 1(312) 455-8498 (outside USA)

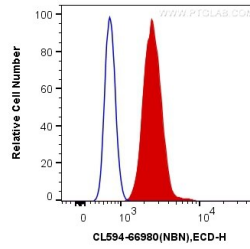
E: proteintech@ptglab.com
W: ptglab.com

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

Données de validation sélectionnées



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite®594-conjugated NBN antibody (CL594-66980, Clone: 1E11E10) at dilution of 1:200.



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug CoraLite®594 Anti-Human NBN (CL594-66980, Clone:1E11E10) (red), or 0.4 ug Mouse IgG2a Isotype Control (CL594-66360-2, Clone: K11A1BZ2) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).