

NBN antibody

Product Information

Catalog No.:	FNab05567
Size:	100µg
Form:	liquid
Purification:	Immunogen affinity purified
Purity:	\geq 95% as determined by SDS-PAGE
Host:	Rabbit
Clonality:	polyclonal
Clone ID:	None
IsoType:	IgG
Storage:	PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12 months(Avoid repeated freeze / thaw cycles.)

Background

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. RAD50 may be required to bind DNA ends and hold them in close proximity. 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. It can also recruit MRE11 and RAD50 to the proximity of DSBs by an interaction with the histone H2AX. 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. The roles of NBS1/MRN encompass DNA damage sensor, signal transducer, and effector, which enable cells to maintain DNA integrity and genomic stability. Forms a complex with RBBP8 to link DNA double-strand break sensing to resection. Enhances AKT1 phosphorylation possibly by association with the mTORC2 complex.

Immunogen information

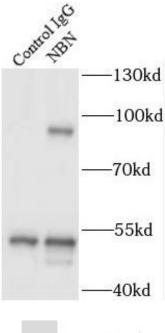
Immunogen:	nibrin
Synonyms:	Nibrin Cell cycle regulatory protein p95 Nijmegen breakage syndrome protein 1 NBN NBS NBS1 P95



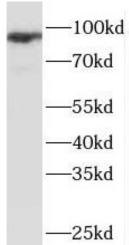
Observed MW:90-95 kDaUniprot ID :060934

Application

Reactivity:Human, Mouse, RatTested Application:ELISA, WB, IPRecommended dilution:WB: 1:500-1:2000; IP: 1:200-1:2000Image:



IP Result of anti-NBS1 (IP:FNab05567, 4ug; Detection:FNab05567 1:800) with HeLa cells lysate 880ug.



HeLa cells were subjected to SDS PAGE followed by western blot with FNab05567(NBN antibody) at dilution of 1:800