

NBS1 antibody (pAb)

Catalog Nos: 39373, 39374

RRID: AB_2793233

Isotype: IgG

Application(s): WB

Reactivity: Human

Volumes: 200 µl, 10 µl

Purification: Affinity Purified

Host: Rabbit

Molecular Weight: 95 kDa

Background: NBS1 (Nijmegen breakage syndrome 1, NBN or 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-kinase/PI4-kinase family members ATM, ATR, and probably DNA-PKcs to the DNA damage sites and activating their functions. NBS1 (NBN) also functions in telomere length maintenance by generating the 3' overhang which serves as a primer for telomerase dependent telomere elongation. NBS1 (NBN) is a major player in the control of intra-S-phase checkpoint and there is some evidence that NBS1 (NBN) is involved in G₁ and G₂ checkpoints. The roles of NBS1 (NBN)/MRN encompass DNA damage sensor, signal transducer, and effector, which enable cells to maintain DNA integrity and genomic stability.

Immunogen: This NBS1 antibody was raised against a peptide containing to the C-terminus of human NBS1.

Buffer: Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

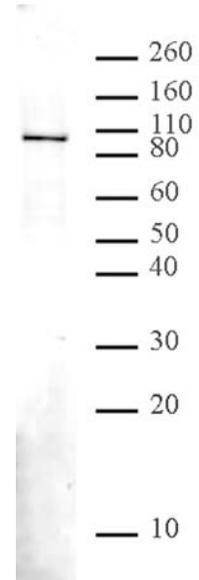
Application Notes:

Applications Validated by Active Motif:

WB: 1:500 - 1:1,000 dilution

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



NBS1 pAb tested by Western blot.

Nuclear extract of HeLa cells (20 µg) was probed with NBS1 pAb (1:500 dilution).