

**Nibrin (phospho Ser278) Polyclonal Antibody**

<b>Catalog No :</b>	YP0567
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;IF;ELISA
<b>Target :</b>	Nibrin
<b>Fields :</b>	>>Homologous recombination;>>Cellular senescence
<b>Gene Name :</b>	NBN
<b>Protein Name :</b>	Nibrin
<b>Human Gene Id :</b>	4683
<b>Human Swiss Prot No :</b>	O60934
<b>Mouse Swiss Prot No :</b>	Q9R207
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Nibrin around the phosphorylation site of Ser278. AA range:251-300
<b>Specificity :</b>	Phospho-Nibrin (S278) Polyclonal Antibody detects endogenous levels of Nibrin protein only when phosphorylated at S278.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

---

**Storage Stability :** -15°C to -25°C/1 year (Do not lower than -25°C)

---

**Observed Band :** 95kD

---

**Cell Pathway :** Homologous recombination;

---

**Background :** Mutations in this gene are associated with Nijmegen breakage syndrome, an autosomal recessive chromosomal instability syndrome characterized by microcephaly, growth retardation, immunodeficiency, and cancer predisposition. The encoded protein is a member of the MRE11/RAD50 double-strand break repair complex which consists of 5 proteins. This gene product is thought to be involved in DNA double-strand break repair and DNA damage-induced checkpoint activation. [provided by RefSeq, Jul 2008],

---

**Function :** disease:Defects in NBN are a cause of genetic susceptibility to breast cancer (BC) [MIM:114480]. BC is an extremely common malignancy, affecting one in eight women during their lifetime. A positive family history has been identified as major contributor to risk of development of the disease, and this link is striking for early-onset breast cancer.,disease:Defects in NBN are the cause of Nijmegen breakage syndrome (NBS) [MIM:251260]. NBS is an autosomal recessive syndrome characterized by chromosomal instability, radiation sensitivity, microcephaly, growth retardation, immunodeficiency and predisposition to cancer, particularly to lymphoid malignancies.,disease:Defects in NBN may be associated with aplastic anemia [MIM:609135]. Aplastic anemia is a disease of bone-marrow failure characterized by peripheral pancytopenia and marrow hypoplasia. Most of the cases of aplastic anemia are idiopa

---

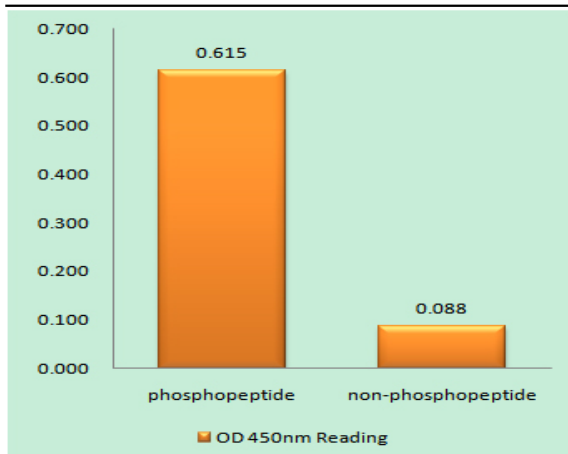
**Subcellular Location :** Nucleus . Nucleus, PML body . Chromosome, telomere . Chromosome . Localizes to discrete nuclear foci after treatment with genotoxic agents (PubMed:26438602, PubMed:10783165, PubMed:26215093). Acetylation of 'Lys-5' of histone H2AX (H2AXK5ac) promotes NBN/NBS1 assembly at the sites of DNA damage (PubMed:26438602) .

---

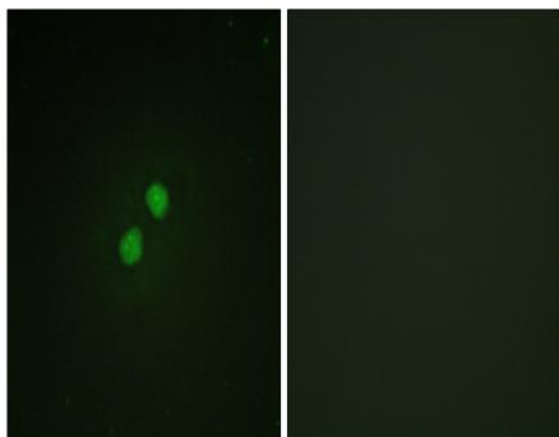
**Expression :** Ubiquitous (PubMed:9590180). Expressed at high levels in testis (PubMed:9590180).

---

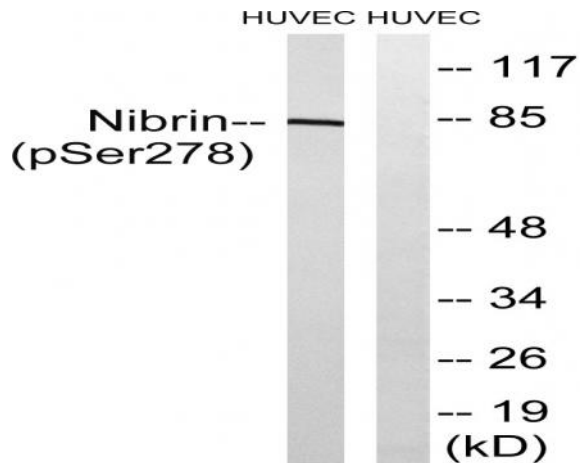
## Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Nibrin (Phospho-Ser278) Antibody



Immunofluorescence analysis of NIH/3T3 cells, using Nibrin (Phospho-Ser278) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HUVEC cells treated with Forskolin 40nM 30', using Nibrin (Phospho-Ser278) Antibody. The lane on the right is blocked with the phospho peptide.