



# Nibrin Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-00462                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Reactivity</b>                  | Human;Rat;Mouse;                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Gene Name</b>                   | NBN                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human Nibrin. AA range:251-300                                                                                                                                                                                                                                                                                                    |
| <b>Specificity</b>                 | Nibrin Polyclonal Antibody detects endogenous levels of Nibrin protein.                                                                                                                                                                                                                                                                                                                               |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                               |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                 |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.                                                                                                                                                                                                                                          |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Synonyms</b>                    | NBN;AT V1;AT V2;ATV;FLJ10155;Nibrin;NBS;NBS1;P95;Cell cycle regulatory protein p95;Nijmegen breakage syndrome protein 1                                                                                                                                                                                                                                                                               |
| <b>Observed Band</b>               | 95kD                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Calculated Molecular Weight</b> | 95kD                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Cell Pathway</b>                | 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). .                                                                          |
| <b>Tissue Specificity</b>          | Ubiquitous (PubMed:9590180). Expressed at high levels in testis (PubMed:9590180).                                                                                                                                                                                                                                                                                                                     |
| <b>Function</b>                    | 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. 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 idiopathic.

#### 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],

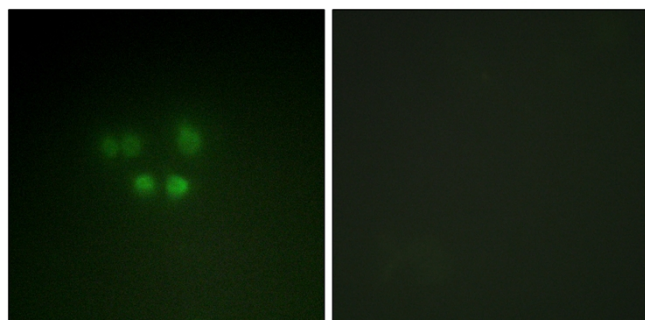
#### matters needing attention

Avoid repeated freezing and thawing!

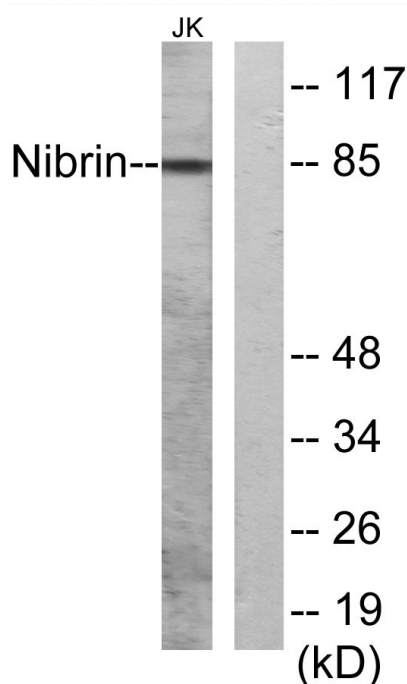
#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

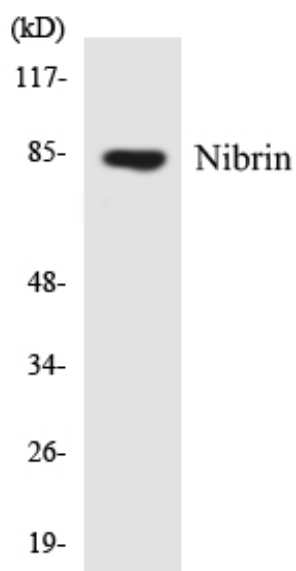
### Products Images



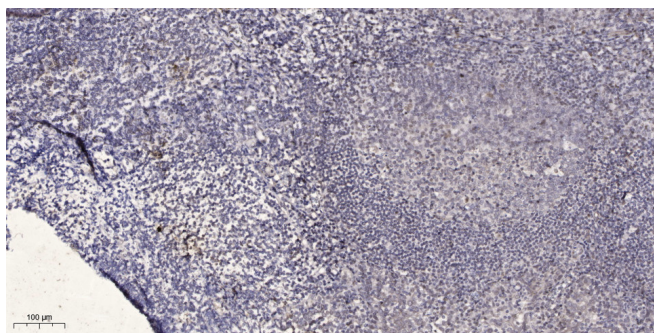
Immunofluorescence analysis of A549 cells, using Nibrin Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using Nibrin Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from K562 cells using Nibrin antibody.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).