



# Nibrin Monoclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-mAb-00462                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <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 Monoclonal 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>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <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.,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

**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

Western Blot analysis of various cells using Nibrin Monoclonal Antibody