

Anti-Lamin B2 Antibody

Catalog # ABO10950

#### Specification

## Anti-Lamin B2 Antibody - Product Information

ApplicationWB, IHC-P, IHC-FPrimary AccessionQ03252HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Lamin-B2(LMNB2) detection. Tested with WB, IHC-P, IHC-F inHuman;Mouse;Rat.Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-Lamin B2 Antibody - Additional Information

Gene ID 84823

Other Names Lamin-B2, LMNB2, LMN2

Calculated MW 67689 MW KDa

Application Details Immunohistochemistry(Frozen Section), 0.5-1 μg/ml, Rat, Human, Mouse<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat<br>Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat<br>

**Subcellular Localization** Nucleus inner membrane; Lipid-anchor; Nucleoplasmic side.

Protein Name Lamin-B2

**Contents** Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence at the C-terminus of human Lamin B2(580-597aa EEDLFHQQGDPRTTSRGC), identical to the related rat and mouse sequences.

**Purification** Immunogen affinity purified.



**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the intermediate filament family.

## **Anti-Lamin B2 Antibody - Protein Information**

Name LMNB2

Synonyms LMN2

#### Function

Lamins are intermediate filament proteins that assemble into a filamentous meshwork, and which constitute the major components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane (PubMed:<a href="http://www.uniprot.org/citations/33033404" target="\_blank">33033404</a>). Lamins provide a framework for the nuclear envelope, bridging the nuclear envelope and chromatin, thereby playing an important role in nuclear assembly, chromatin organization, nuclear membrane and telomere dynamics (PubMed:<a href="http://www.uniprot.org/citations/33033404" target="\_blank">33033404</a>). The structural integrity of the lamina is strictly controlled by the cell cycle, as seen by the disintegration and formation of the nuclear envelope in prophase and telophase, respectively (PubMed:<a href="http://www.uniprot.org/citations/33033404" target="\_blank">33033404</a>).

Cellular Location Nucleus lamina.

#### Anti-Lamin B2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Lamin B2 Antibody - Images





Anti-Lamin B2 antibody, ABO10950, Western blottingLane 1: HELA Cell Lysate Lane 2: U87 Cell Lysate



Anti-Lamin B2 antibody, ABO10950, IHC(P)IHC(P): Rat Intestine Tissue

# Anti-Lamin B2 Antibody - Background

Lamin B2, also called LMNB2, is a protein associated with laminopathies. The LMNB2 gene is mapped to the G-negative subtelomeric band p13.3 of chromosome 19 by in situ hybridization. The LMNB2 gene contains 12 exons. Model organisms have been used in the study of Lamin B2 function. A conditional knockout mouse line, called Lmnb2, is generated as part of the International Knockout Mouse Consortium program-a high-throughput mutagenesis project to generate and distribute animal models of disease to interested scientists. A highly sensitive procedure about mapping the start site of DNA replication in a 13.7-kb region of human chromosome 19 coding for lamin B2 is developed for the identification of the origin of bidirectional DNA synthesis in single-copy replicons of mammalian cells.