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Polyclonal Antibody to Lamin-B2 (LMNB2) (221-460) - Aff - Purified

Alternate names: LMN2, LMNB, LMNB-2, LMNB2, Lamin-B2, Nuclear Envelope Marker

Catalog No.: AP19033PU-N

Quantity: 0.1 ml

Concentration: 1.0 mg/ml

Background: An important part of the cell nucleus is formed by nuclear lamina. Nuclear lamins form a network of filaments at the nucleoplasmic site of the nuclear membrane. Two main subtypes of nuclear lamins can be distinguished, i.e. A-type lamins and B-type lamins. The A-type lamins comprise a set of three proteins arising from the same gene by alternative splicing, i.e. Lamin A, Lamin C and lamin Adel10, while the B-type lamins include two proteins arising from two distinct genes, i.e. Lamin B1 and Lamin B2.
The nuclear lamins comprise a unique subclass of the intermediate filament protein family. They share a molecular domain organisation with the other intermediate filament proteins in that they are fibrous molecules that have an aminoterminal globular head, a central rod of a-helices and a carboxyterminal globular domain. Many biochemical and molecular features of lamins have been studied, but their functions remain still largely undetermined. One of the functions ascribed to the lamina is the maintenance of the structural integrity of the nucleus. Besides interactions with the nuclear membrane and other intermediate filaments, lamins interact with the nuclear chromatin. Eukaryotic chromatin is organised into loops, which are attached to the nuclear matrix. This organisation is thought to contribute to compaction of the chromatin and regulation of gene expression. Lamins, as part of the nuclear matrix, may be involved in these processes since chromatin binding sites have been detected in both A- and B-type Lamins.

Uniprot ID: Q03252

NCBI: 9606

GeneID: 84823

Host: Rabbit

Immunogen: Recombinant protein fragment contain a sequence corresponding to a region within amino acids 221 and 460 of Lamin B2

Format: **State:** Liquid purified IgG fraction.
Purification: Antigen-Affinity Chromatography.
Buffer System: 0.1M Tris, 0.1M Glycine, 10% Glycerol and 0.01% Thimerosal as preservative.

Applications: **Western blotting:** 1/500-1/3000.
Positive Controls: 293T, A431, H1299, HeLa, HepG2, Molt-4, Raji.
Immunohistochemistry on Paraffin Sections: 1/100-1/250.

Suggested antigen retrieval: Heat mediated 10mM Citrate buffer (pH 6.0) or Tris-EDTA buffer (pH 8.0).
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

Recognizes Lamin B2.
Cellular Localization: Nucleus inner membrane, Lipid-anchor, Nucleoplasmic side
Species: Human.
Other species not tested.

Add. Information:

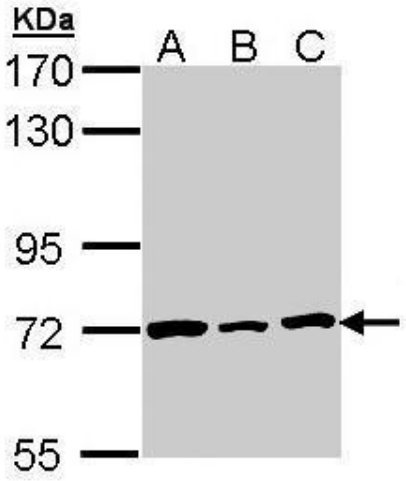
Predicted Molecular Weight: 68 kDa

Storage:

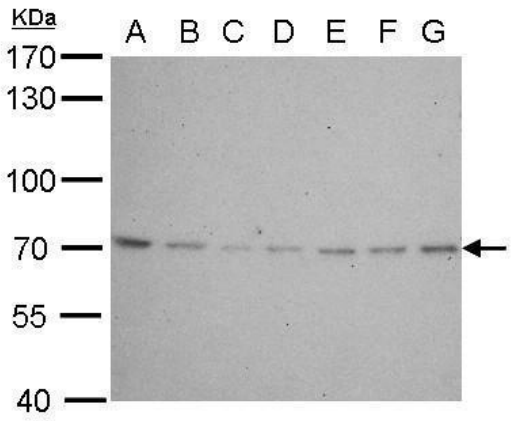
Store the antibody undiluted (in aliquots) at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Pictures:

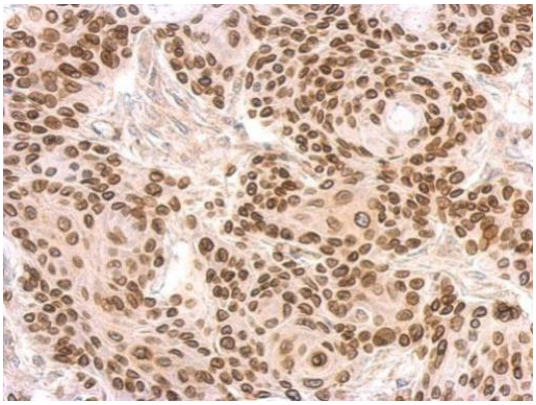
Sample (30 ug of whole cell lysate). A: H1299. B: Hela. C: Hep G2 . 7.5% SDS PAGE. TA308805 diluted at 1:1000.



Lamin B2 antibody [N3C2], Internal detects LMNB2 protein by Western blot analysis. A. 30 ug Neuro2A whole cell lysate/extract. B. 30 ug GL261 whole cell lysate/extract. C. 30 ug C8D30 whole cell lysate/extract. D. 30 ug NIH-3T3 whole cell lysate/extract.



Lamin B2 antibody [N3C2], Internal detects LMNB2 protein at on Cal27 xenograft by immunohistochemical analysis. Sample: Paraffin-embedded Cal27 xenograft. Lamin B2 antibody [N3C2], Internal (TA308805) dilution: 1:500.



Lamin B2 antibody [N3C2], Internal immunoprecipitates Lamin B2 protein in IP experiments. IP Sample: HepG2 whole cell lysate/extract A : 30 ug whole cell lysate/extract of Lamin B2 protein expressing HepG2 cells B : Control with 3 ug of pre-immune rabbit