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Lamin B1 Antibody

Rabbit mAb
Catalog # AP90034

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	P20700
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	LMN; ADLD; LMN2; LMNB; Lamin B1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	66408

Additional Information

Dilution	WB 1:3000~1:10000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Lamin B1
Description	The nuclear lamina consists of a two-dimensional matrix of proteins located next to the inner nuclear membrane. The lamin family of proteins make up the matrix and are highly conserved in evolution. During mitosis, the lamina matrix is reversibly disassembled as the lamin proteins are phosphorylated. Lamin proteins are thought to be involved in nuclear stability, chromatin structure and gene expression.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

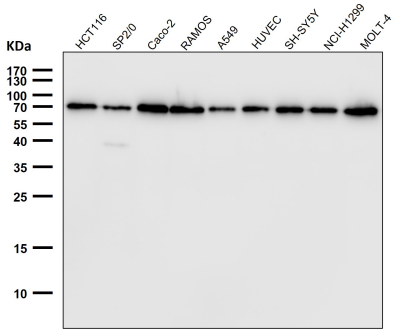
Name	LMNB1
Synonyms	LMN2, LMNB
Function	Lamins are intermediate filament proteins that assemble into a filamentous meshwork, and which constitute the major components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane (PubMed:28716252, PubMed:32910914). Lamins 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:28716252, PubMed:32910914). 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:28716252, PubMed:32910914). Plays a role in sperm morphological development during

late stages of spermiogenesis, particularly the anchoring of the sperm head to the tail (PubMed:38870534). Component of the LMNB1/SUN5/SEPT12 bridge that connects the sperm proximal centriole to the implantation fossa, the bridge functions to prevent detachment of the proximal centriole from the posterior nucleus during spermiogenesis (PubMed:38870534).

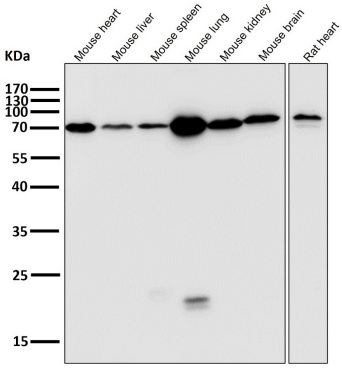
Cellular Location

Nucleus lamina. Note=Expressed in the posterior part of the nucleus during mid-steps of spermiogenesis, expression becomes more localized to the implantation fossa in later stages (By similarity) Expressed at the neck region in mature sperm (By similarity) {ECO:0000250|UniProtKB:P14733}

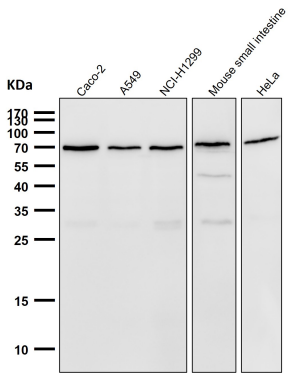
Images



All lanes use AP90034 Lamin B1 Antibody at 1:10000 dilution for 1 hour at room temperature.



All lanes use AP90034 Lamin B1 Antibody at 1:20000 dilution for 1 hour at room temperature.



All lanes use AP90034 Lamin B1 Antibody at 1:10000 dilution for 1 hour at room temperature.

Image not found : 202311/AP90034-IHC.jpg

Immunohistochemical analysis of paraffin-embedded rat liver, using Lamin B1 Antibody.

Image not found : 202311/AP90034-IF.jpg

Immunofluorescent analysis of HepG2 cells, using Lamin B1 Antibody.

Image not found : 202311/AP90034-wb6.jpg

Zinc inhibited LPS-induced inflammatory responses by upregulating A20 expression in microglia BV2 cells.
-Journal of Affective Disorders

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.