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Anti-Lamin B1 LMNB1 Rabbit Monoclonal Antibody

Catalog # ABO13908

Product Information

Application	WB, IHC, IF, ICC, IP
Primary Accession	P20700
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Lamin B1 LMNB1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

Additional Information

Gene ID	4001
Other Names	Lamin-B1, LMNB1, LMN2, LMNB
Calculated MW	66408
Application Details	WB 1:3000-1:10000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:50
Subcellular Localization	Nucleus inner membrane; Lipid-anchor; Nucleoplasmic side.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: DC-12
Immunogen	A synthesized peptide derived from human Lamin B1
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	LMNB1
Synonyms	LMN2, LMNB

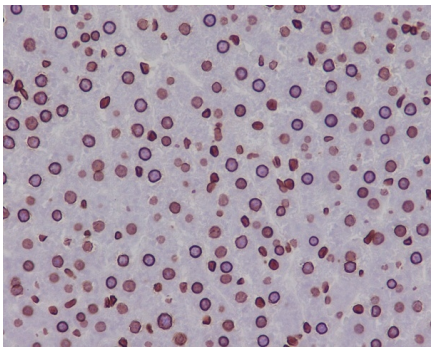
Function

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).

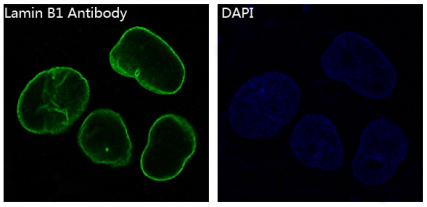
Cellular Location

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}

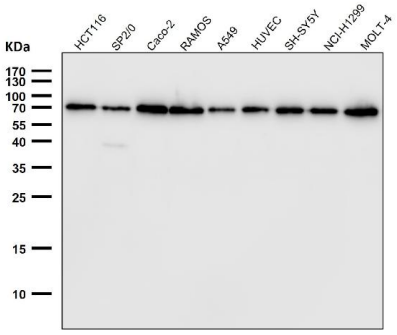
Images



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

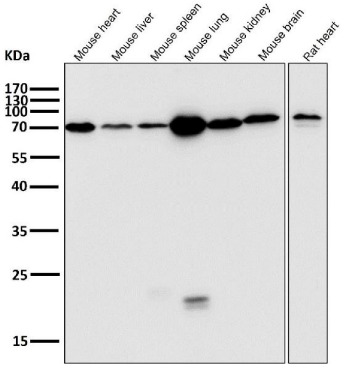


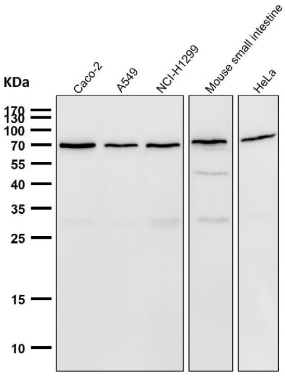
Immunofluorescent analysis of HepG2 cells, using Lamin B1 Antibody.



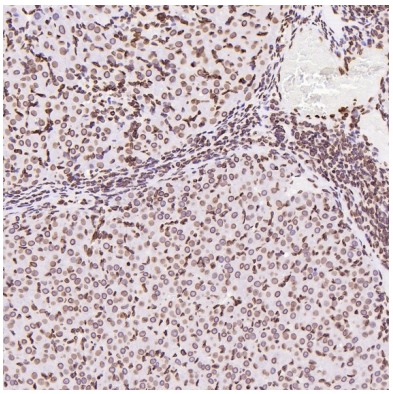
All lanes use Lamin B1 Antibody at 1:10000 dilution for 1 hour at room temperature.

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

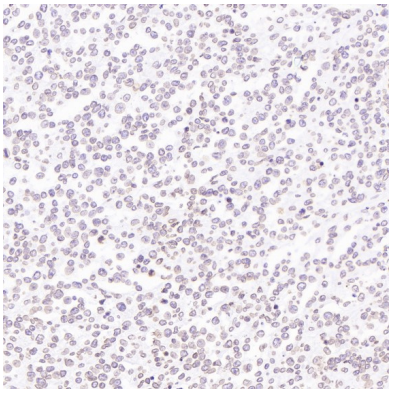




All lanes use Lamin B1 Antibody at 1:10000 dilution for 1 hour at room temperature.

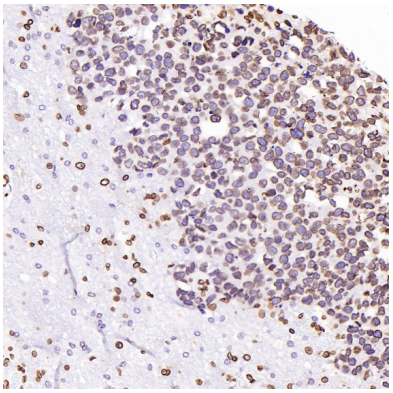


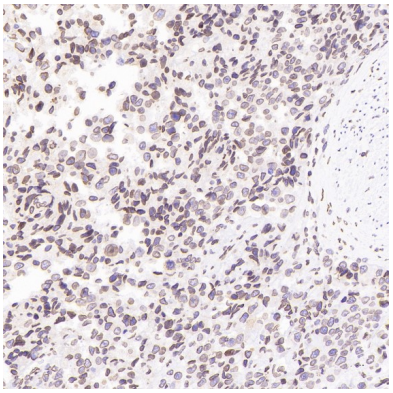
Immunohistochemical analysis of paraffin-embedded Rat ovary, using the Antibody at 1:200 dilution.



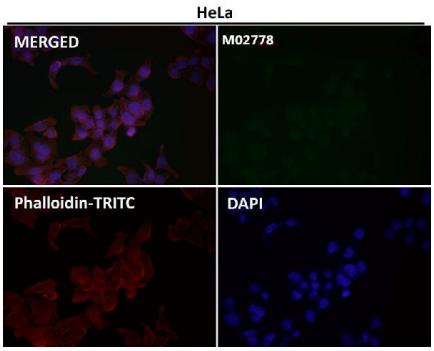
Immunohistochemical analysis of paraffin-embedded Human non-Hodgkin's lymphoma, using the Antibody at 1:100 dilution.

Immunohistochemical analysis of paraffin-embedded Human glioblastoma, using the Antibody at 1:100 dilution.





Immunohistochemical analysis of paraffin-embedded Human prostate cancer, using the Antibody at 1:100 dilution.



Immunofluorescent analysis using the Antibody at 1:150 dilution.

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