10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Lamin B1 Antibody

Mouse Monoclonal Antibody
Catalog # AP53431

Product Information

Application	WB, IF, ICC
Primary Accession	P20700
Other Accession	NM_005573
Reactivity	Human, Mouse, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Conjugate	Unconjugated
Immunogen	Recombinant human Lamin B1 protein.
Purification	Affinity Purified
Calculated MW	66408

Additional Information

Gene ID	4001
Other Names	ADLD; lamin B1; Lamin-B1; LMN; LMN2; LMNB; Lmnb1; LMNB1_HUMAN; MGC111419; OTTHUMP00000159218.
Dilution	WB~~1:500 IF~~1:50~200 ICC~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid 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).

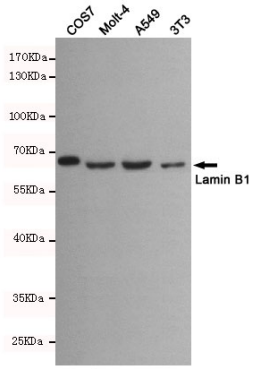
Cellular Location

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}

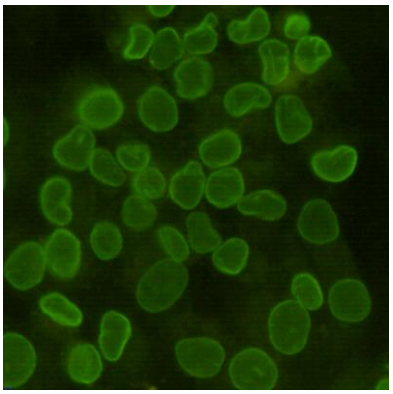
Background

Lamins are components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane, which is thought to provide a framework for the nuclear envelope and may also interact with chromatin.

Images



Western blot detection of Lamin B1 in COS7, Molt-4, A549 and 3T3 cell lysates using Lamin B1 mouse mAb(dilution 1:500).Predicted band size:68kDa.Observed band size:68kDa.



Immunocytochemistry staining of Hela cells fixed with 4% Paraformaldehyde and using anti-Lamin B1 mouse mAb (dilution 1:100).

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