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Anti-Lamin B1 Antibody

Catalog # AP51319

Product Information

Application	WB, IHC
Primary Accession	P20700
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	66408

Additional Information

Gene ID	4001
Other Names	LMN2; LMNB; Lamin-B1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Lamin B1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

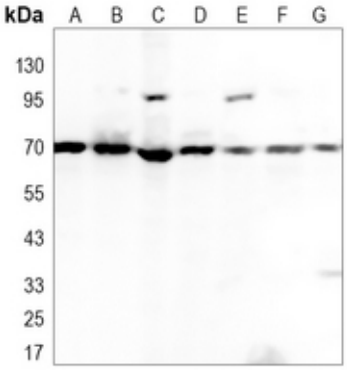
Name	LMNB1
Synonyms	LMN2, LMNB
Function	Lamins are intermediate filament proteins that assemble into a filamentous meshwork, and which constitute the major components of the nuclear lamina, a fibrous layer on the nucleoplasmic side of the inner nuclear membrane (PubMed:28716252, PubMed:32910914). Lamins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

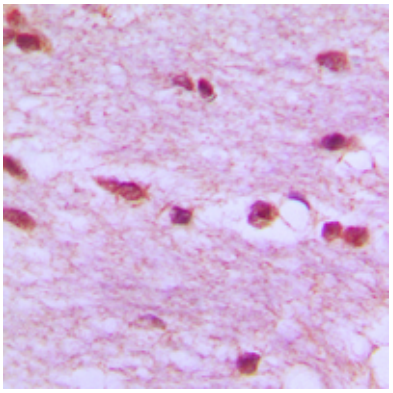
References

Pollard K.M.,et al.Mol. Cell. Biol. 10:2164-2175(1990).
Lin F.,et al.Genomics 27:230-236(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Bienvenut W.V.,et al.Submitted (DEC-2008) to UniProtKB.

Images



Western blot analysis of Lamin B1 expression in 293T (A), Hela (B), K562 (C), mouse brain (D), mouse liver (E), rat brain (F), rat liver (G) whole cell lysates. (Predicted band size: 66 kD; Observed band size: 66-70 kD)



Immunohistochemical analysis of Lamin B1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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