

# Rabbit Anti-Lamin B antibody

# SL23709R

Product Name:	Lamin B
Chinese Name:	核纤层蛋白B抗体(The nucleus膜Maker)
Alias:	lamin B1; LMB1; LMN; LMN2; LMNB 1; LMNB; LMNB1; MGC111419; LMNB1_HUMAN; Lamin-B1.
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Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	64kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Lamin B:171-270/586
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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. Vertebrate lamins

consist of two types, A and B. This gene encodes one of the two B type proteins, B1. Alternative splicing results in transcript variants and a duplication of this gene is associated with autosomal dominant adult-onset leukodystrophy (ADLD). [provided by RefSeq, Oct 2010].

## **Function:**

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.

#### **Subunit:**

Homodimer. Interacts with lamin-associated polypeptides IA, IB and 2.

#### **Subcellular Location:**

Nucleus inner membrane; Lipid-anchor; Nucleoplasmic side.

#### Post-translational modifications:

B-type lamins undergo a series of modifications, such as farnesylation and phosphorylation. Increased phosphorylation of the lamins occurs before envelope disintegration and probably plays a role in regulating lamin associations.

#### DISEASE:

Defects in LMNB1 are the cause of leukodystrophy demyelinating autosomal dominant adult-onset (ADLD) [MIM:169500]. ADLD is a slowly progressive and fatal demyelinating leukodystrophy, presenting in the fourth or fifth decade of life. Clinically characterized by early autonomic abnormalities, pyramidal and cerebellar dysfunction, and symmetric demyelination of the CNS. It differs from multiple sclerosis and other demyelinating disorders in that neuropathology shows preservation of oligodendroglia in the presence of subtotal demyelination and lack of astrogliosis.

### Similarity:

Belongs to the intermediate filament family.

#### **SWISS:**

P20700

#### Gene ID:

4001

#### Database links:

Entrez Gene: 396223Chicken

Entrez Gene: 4001 Human

Entrez Gene: 16906 Mouse

Entrez Gene: 116685Rat

Omim: 150340Human

SwissProt: P14731Chicken

SwissProt: P20700Human

SwissProt: P14733Mouse

SwissProt: P70615Rat

Unigene: 89497Human

Unigene: 4105 Mouse

Unigene: 11362Rat

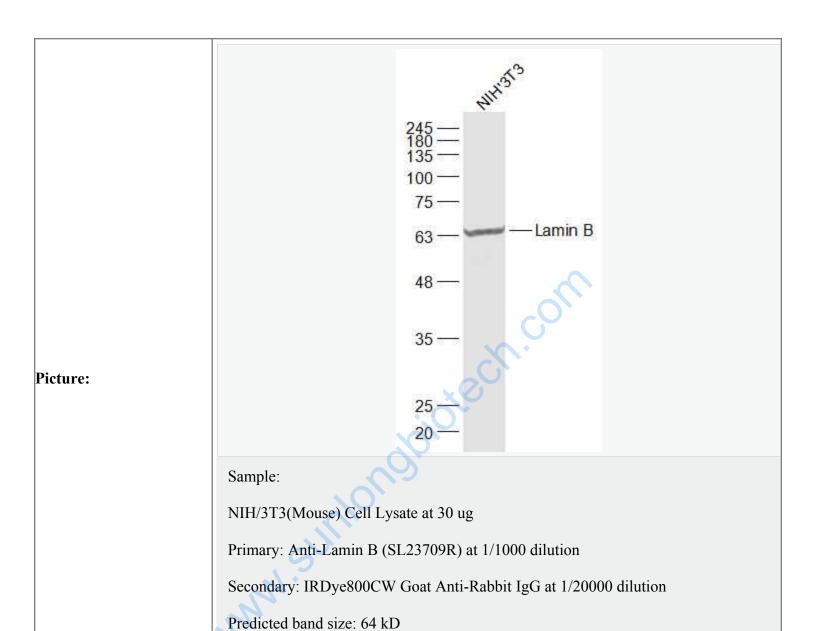
## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

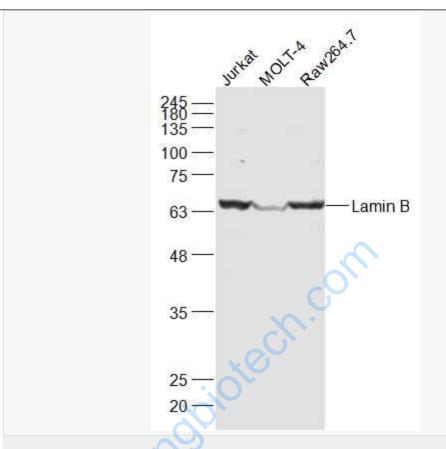
核膜Maker(Nuclear Envelope Marker)

核纤层蛋白(Lamin)

是紧贴核内膜的一层厚度为20~50nm的纤维蛋白层或纤维网络。核纤层与细胞质骨架、核骨架连成一个整体,一般认为核纤层将核被膜和染色质提供了结构支架。有学者研究认为:lamin蛋白与Apoptosis及衰老有关联,它包括:核纤层蛋白A、核纤层蛋白B、核纤层蛋白C几个不同亚型的蛋白。



Observed band size: 64 kD



# Sample:

Jurkat(Human) Cell Lysate at 30 ug

MOLT-4(Human) Cell Lysate at 30 ug

Raw264.7(Mouse) Cell Lysate at 30 ug

Primary: Anti-Lamin B (SL23709R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 64 kD

Observed band size: 64 kD