

Product datasheet for **BM4502**

Lamin B2 (LMNB2) Mouse Monoclonal Antibody [Clone ID: LN43]

Product data:

Product Type:	Primary Antibodies
Clone Name:	LN43
Applications:	FC, IF, IHC, WB
Recommended Dilution:	Suitable for Immunocytochemistry on Frozen Sections, Immunoblotting and Flow Cytometry. <i>Recommended Dilutions:</i> 1/100-1/200 for Flow cytometry and for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent. 1/100-1/1000 for Immunoblotting applications.
Reactivity:	Hamster, Human, Mouse, Porcine, Xenopus, Zebrafish
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Detergent insoluble fraction of potoroo cell line PtK1.
Specificity:	Reacts with an epitope located in the C-terminal part of Lamin B2.
Formulation:	PBS with 0.09% Sodium Azide as preservative. State: Purified State: Liquid purified IgG fraction.
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store the antibody (undiluted) at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles.
Stability:	Shelf life: One year from despatch.
Gene Name:	lamin B2
Database Link:	Entrez Gene 84823 Human Q03252



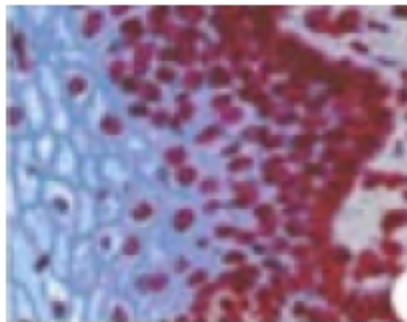
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Background:

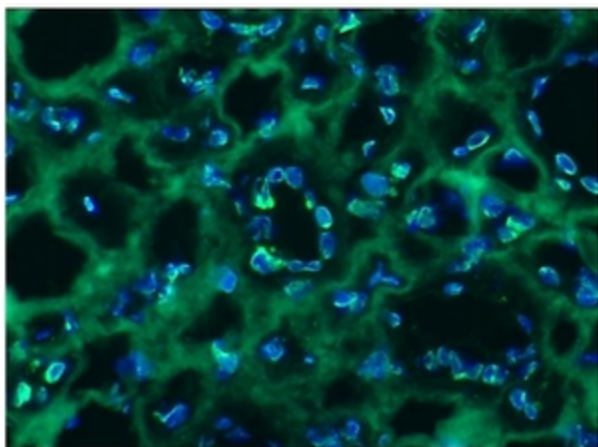
An important part of the cell nucleus is formed by nuclear lamina. Nuclear lamins form a network of filaments at the nucleoplasmic site of the nuclear membrane. Two main subtypes of nuclear lamins can be distinguished, i.e. A-type lamins and B-type lamins. The A-type lamins comprise a set of three proteins arising from the same gene by alternative splicing, i.e. lamin A, lamin C and lamin A/C, while the B-type lamins include two proteins arising from two distinct genes, i.e. lamin B1 and lamin B2. The nuclear lamins comprise a unique subclass of the intermediate filament protein family. They share a molecular domain organisation with the other intermediate filament proteins in that they are fibrous molecules that have an aminoterminal globular head, a central rod of α -helices and a carboxyterminal globular domain. Many biochemical and molecular features of lamins have been studied, but their functions remain still largely undetermined. One of the functions ascribed to the lamina is the maintenance of the structural integrity of the nucleus. Besides interactions with the nuclear membrane and other intermediate filaments, lamins interact with the nuclear chromatin. Eukaryotic chromatin is organised into loops, which are attached to the nuclear matrix. This organisation is thought to contribute to compaction of the chromatin and regulation of gene expression. Lamins, as part of the nuclear matrix, may be involved in these processes since chromatin binding sites have been detected in both A- and B-type lamins.

Synonyms:

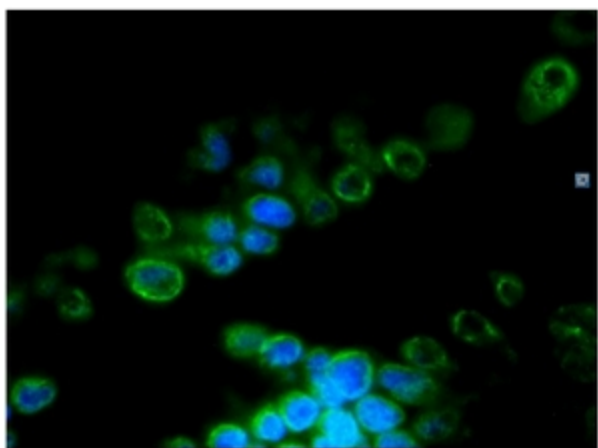
Lamin-B2, LMNB2, LMNB-2, LMN2, LMNB, Nuclear Envelope Marker

Product images:


Lamin B2 antibody Immunostaining of Human epidermis.



Immunohistochemistry on frozen sections of human kidney showing nuclear lamina staining in the ductal epithelium.



Immunofluorescence staining of a 9 days old Zebrafish embryo