

AB-PN966

LMNA-pT19+S22 Antibody

Phosphosite-specific rabbit polyclonal antibody for LMNA. This phosphothreonine-site antibody also cross-reacts with serine, threonine and glutamic acid substitutions in the phosphosite.

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Target Protein

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|--------------------------------|-----------------------------------------------------|
| Protein Name Long: | Prelamin-A/C |
| Protein Alias: | 70 kDa lamin; CMD1A; HGPS; LAMA; LGMD1B; LMN1; PRO1 |
| UniProt ID: | P02545 |
| Protein Molecular Mass: | 74,139 Da (664 AA) |

Immunogen

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| Antibody Immunogen Source: | Synthetic phosphopeptide patterned after human LMNA |
| Antibody Immunogen Sequence: | CASS(pT)PL(pS)PTR |
| Antibody Immunogen Description: | Corresponds to amino acid residues A16 to R25. Lamin A/C T19 and S22 phosphorylation stimulate functional activity and inhibit interaction with LMNA and LMNC. These are major <i>in vivo</i> phosphorylation sites in Lamin A/C (≥ 109 and ≥ 224 reports, respectively, from high throughput mass spectrometry studies recorded in PhosphoSitePlus). LMNA is known to be phosphorylated <i>in vitro</i> at T19 by CDK1 (CDC2), and S22 by CDK1 (CDC2), ERK2 (MAPK1), and PKCd. |
| Antibody Target Type: | Phosphosite-specific |

Production

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| Antibody Host Species: | Rabbit |
| Antibody Type: | Polyclonal |
| Antibody Isotype: | IgG |
| Production Method: | The immunizing peptide was produced by solid phase synthesis on a multi-peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris. |
| Amount: | 25 μ g |
| Antibody Concentration: | 0.6 mg/ml |
| Storage Buffer: | Phosphate buffered saline pH 7.4, 0.05% Thimerosal |
| Storage Conditions: | For long term storage, keep frozen at -40°C or lower. Stock solution can be kept at $+4^{\circ}\text{C}$ for more than 3 months. Avoid repeated freeze-thaw cycles. |
| Storage Stability: | >2 years |

Applications

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| Product Use: | Western blotting Antibody microarray |
| Antibody Dilution Recommended: | 2 µg/ml for immunoblotting |
| Antibody Species Reactivity: | Human Chimpanzee Rhesus macaque Dog Rat Mouse Chicken Frog Fruit fly |

This product is for *in vitro* research use only and is not intended for use in humans or animals.

For more information on our products please visit <https://kinexus-ca.myshopify.com/> or contact us at 1-866-546-3987