

AB-PN620

MCM2-pY137+pS139 Antibody

Phosphosite-specific rabbit polyclonal antibody for MCM2



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Target Protein

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|--------------------------------|---|
| Protein Name Long: | DNA replication licensing factor MCM2 |
| Protein Alias: | BM28; CDCL1; DNA replication licensing factor MCM2; KIAA0030; MCMD2; Minichromosome maintenance protein 2 homologue |
| UniProt ID: | P49736 |
| Protein Molecular Mass: | 101,896 Da (904 AA) |

Immunogen

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| Antibody Immunogen Source: | Synthetic phosphopeptide patterned after human MCM2 |
| Antibody Immunogen Sequence: | CGLL(pY)D(pS)DEE |
| Antibody Immunogen Description: | Corresponds to amino acid residues G134 to E142. S139 phosphorylation stimulates transcriptional activity and induces interaction with DNA. The effect of Y137 phosphorylation is unclear. These are two of the major <i>in vivo</i> phosphorylation sites in MCM2 (≥ 117 and ≥ 418 reports, respectively, from high throughput mass spectrometry studies recorded in PhosphoSitePlus). MCM2 is known to be phosphorylated <i>in vitro</i> at S139 by CDC7 (CDC7L1), CDK2, CDK7, and CK2a1 (CSNK2A1). |
| 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 multipепptide 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: | 1 mg/ml |
| Storage Buffer: | Phosphate buffered saline pH 7.4, 0.05% Thimerasol |
| 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 Platypus Chicken Frog Zebra fish Honey bee |

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