

Anti-Cdc25b Antibody Picoband® Fluoro647 Conjugated

Catalog Number: A01899-Fluoro647

About Cdc25b

Central to the onset of mitosis in all eukaryotic cells is the CDC2 protein kinase, the activity of which is negatively regulated by phosphorylation and positively activated by dephosphorylation. The latter function is carried out by a specific phosphatase, CDC25. At least 3 human CDC25 genes code for the A, B, and C forms of CDC25. CDC25B is mapped to 20p13. P38 kinase has a critical role in the initiation of a G2 delay after ultraviolet radiation. Inhibition of p38 blocks the rapid initiation of this checkpoint in both human and murine cells after ultraviolet radiation. In vitro, p38 binds and phosphorylates CDC25B at serines 309 and 361, and CDC25C at serine-216; phosphorylation of these residues is required for binding to 14-3-3 proteins. In vivo, inhibition of p38 prevents both phosphorylation of CDC25B at serine-309 and 14-3-3 binding after ultraviolet radiation, and mutation of this site is sufficient to inhibit the checkpoint initiation. Regulation of CDC25B phosphorylation by p38 is a critical event for initiating the G2/M checkpoint after ultraviolet radiation.

Overview

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| Product Name | Anti-Cdc25b Antibody Picoband® Fluoro647 Conjugated |
| Reactive Species | Mouse, Rat |
| Application | Recommended applications are based on the parent unconjugated antibody (ELISA, IHC, WB). Customers may select suitable applications according to their experimental needs. |
| Clonality | Polyclonal |
| Formulation | Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.02% NaN ₃ . |
| Storage Instructions | At -20°C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light. |
| Host | Rabbit |
| Uniprot ID | P30306 |

Technical Details

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| Immunogen | E.coli-derived mouse Cdc25b recombinant protein (Position: D118-D339). |
| Cross Reactivity | No cross-reactivity with other proteins. |
| Isotype | Rabbit IgG |
| Form | Liquid |
| Concentration | 0.5 mg/mL |
| Purification | Immunogen affinity purified. |
| Conjugate | Fluoro647 Excitation Wavelength: 650 nm |

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| | Emission Wavelength: 665 nm |
| Suggested Dilutions | Optimal dilutions should be determined by end users. |

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Anti-Cdc25b Antibody - Fluoro647

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