

### Certificate of Analysis

**Product:** Anti-cdc2 Cyclin Dependent Kinase [Rabbit]

**Code:** 100-401-160

**Lot #** 11755

**Size:** 100 ul

**Physical State:** Liquid (sterile filtered)

**Protein Concentration:** 85 mg/ml (by Refractometry)

**Buffer:** None

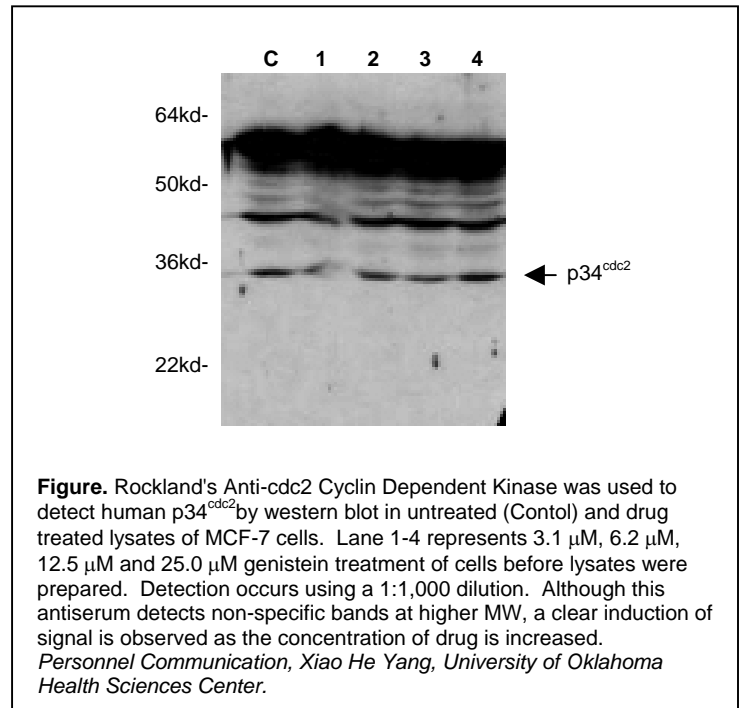
**Stabilizer:** None

**Preservative:** 0.01% (w/v) Sodium Azide

**Background Information:** p34 cdc2 is a serine-threonine protein kinase of 34,000 daltons that complexes with cyclin to form maturation promoting factor (MPF). The inactive form of the protein is phosphorylated at threonine (T) and tyrosine (Y) residues. In humans the phosphorylation appears to be performed by p60<sup>src</sup>. The active form of the protein is dephosphorylated and it functions by phosphorylating a number of proteins. The phosphorylation activity is coupled to the entry into the M-phase of the cell. p34 cdc2 protein must be associated with a normal cyclin protein for the M-phase to be completed normally. Association with deletion mutants of cyclin halts the M-phase before it is completed.

**Application Note(s):** This antibody is suitable for immunoblotting, immunohistochemistry immuno-precipitation (as active kinase), and immunoblotting. HeLa cell lysate or human colon carcinoma is suggested as a positive control for immunoblotting. LEP fibroblast cell lysate is suggested as a negative control. This product is suitable for the detection by immunoblot of human, rat and mouse cdc2. For immunohistochemistry use paraffin embedded tissue.

**Storage Conditions:** Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening.



<b>Recommended Dilution(s):</b>	<b>ELISA</b>	1:500 - 1:2,000
	<b>WESTERN BLOT</b>	1:500 - 1:1,000
	<b>IMMUNOHISTOCHEMISTRY</b>	1:200 - 1:1,000
	<b>OTHER APPLICATIONS</b>	User Optimized

**Purity and Specificity:** This product was prepared from monospecific antiserum by delipidation and defibrination. Antiserum will specifically react with a 34 kDa cdc2 protein from human, rat and mouse tissue. No reaction was observed against other related cyclin dependent kinases. Cross reactivity with cdc2 from other species may also occur.

**Immunogen:** cdc2 peptide corresponding to the C-terminus of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH).

**Specific Reference(s):**

Draetta, G., Beach, D. (1988) Activation of cdc2 protein kinase during mitosis in human cells: cell cycle dependent phosphorylation and subunit rearrangement. *Cell* **54**; 17-26.

Giordano, A., Whyte, P., Harlow, E., Franza, B., Beach D. and Draetta, G. (1989) A 60 kd cdc-2 associated polypeptide complexes with the E1A proteins of adenovirus-infected cells. *Cell* **58**; 981-990.

**USDA Certification:** All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

**Note:** This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.