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(54) **Assay methods for cyclin dependent kinases**

(57) Disclosed herein are novel methods for measuring the activity of one or more cyclin dependent kinases (CDKs) in a sample, based upon the quantitation of CDK-phosphorylated Rb protein. The method for measuring cyclin-dependent kinase (CDK) activity includes the following: i) contacting the sample with an anti-retinoblastoma protein (Rb) capture antibody that specifically recognizes a CDK-phosphorylated Rb and isolating the capture antibody-Rb complex; ii) contacting the capture antibody-Rb complex with an anti-Rb primary anti-

body and isolating the capture antibody-Rb-primary antibody complex; and iii) measuring the amount of CDK-phosphorylated Rb in the sample by quantitating the primary antibody present in the capture antibody-Rb-primary antibody complex. These methods may be used to assess intracellular CDK activity in cultured cells or in cells taken from an animal. Also disclosed are methods of identifying an agent that modulates the CDK activity.

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EUROPEAN SEARCH REPORT

Application Number
EP 01 30 3854

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	<p>WATANABE Y ET AL.: "pRB phosphorylation is regulated differentially by cyclin-dependent kinase (Cdk) and Cdk4 in retinoic-acid induced neuronal differentiation of P19 cells." BRAIN RESEARCH, vol. 842, 1999, pages 342-350, XP002197415 * the whole document, see especially pages 345 and 348 *</p> <p>---</p>	1-23	<p>G01N33/573 G01N33/68 G01N33/543 G01N33/50 A61P25/28</p>
Y	<p>JUAN G ET AL.: "Phosphorylation of retinoblastoma susceptibility gene protein assayed in individual lymphocytes during their mitogenic stimulation" EXPERIMENTAL CELL RESEARCH, vol. 239, 1998, pages 104-110, XP002108543 * the whole document, see especially p. 104 and 109 *</p> <p>---</p>	9-23	
Y	<p>WO 94 17413 A (PARACELSIAN INC ;BABISH JOHN G (US); MA XINFANG (US); RININGER JOS) 4 August 1994 (1994-08-04) *the whole document, see especially p. 7*</p> <p>-----</p>	9-23	<p>TECHNICAL FIELDS SEARCHED (Int.Cl.7)</p> <p>G01N C12Q</p>
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 29 April 2002	Examiner STEINHEIMER, K
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p>		<p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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