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(54) Title: MUTATIONS IN THE BCR-ABL TYROSINE KINASE ASSOCIATED WITH RESISTANCE TO STI-571

(57) Abstract: The invention described herein relates to novel genes and their encoded proteins, termed Mutants Associated with Resistance to STI-571 (e.g., T315I Bcr-Abl), and to diagnostic and therapeutic methods and compositions useful in the management of various cancers that express MARS. The invention further provides methods for identifying molecules that bind to and/or modulate the functional activity of MARS.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US02/18729

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
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According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/4, 6, 7.1		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Medline.Biosis, Scisearch, Cancerlit, Lifesci, Biotechds, Caplus.PCTfull, USpatfull, Europatfull on STN.		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01/07659 A2 (PRINCETON UNIVERSITY) 01 February 2001, page 36, lines 3-22, page 39, lines 37-38 and page 42, line 21 to page 43, line 3.	1-50
Y	CARROLL et al. CGP 57148, a Tyrosine Kinase Inhibitor, Inhibits the Growth of Cells Expressing BCR-ABL, TEL-ABL and TEL-PDGFR Fusion Proteins. Blood. 15 December 1997, Vol.90, No. 12, pages 4947-4952, see entire document.	1-50
Y	DEININGER et al. The Tryosine Kinase Inhibitor CGP57148B Selectively Inhibits the Growth of BCR-ABL-Positive Cells. Blood. 01 November 1997, Vol.90, No. 9, pages 3691-3698, see entire document.	1-50.
Y	ZIMMERMANN et al. Potent and Selective Inhibitors of the ABL-Kinase. Bioorganic and Medicinal Chemistry Letters. 1997, Vol.7, No. 2, pages 187-192, see entire document.	1-50
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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