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(54) Title: COMPOSITIONS AND METHODS FOR THE TREATMENT OF CANCER

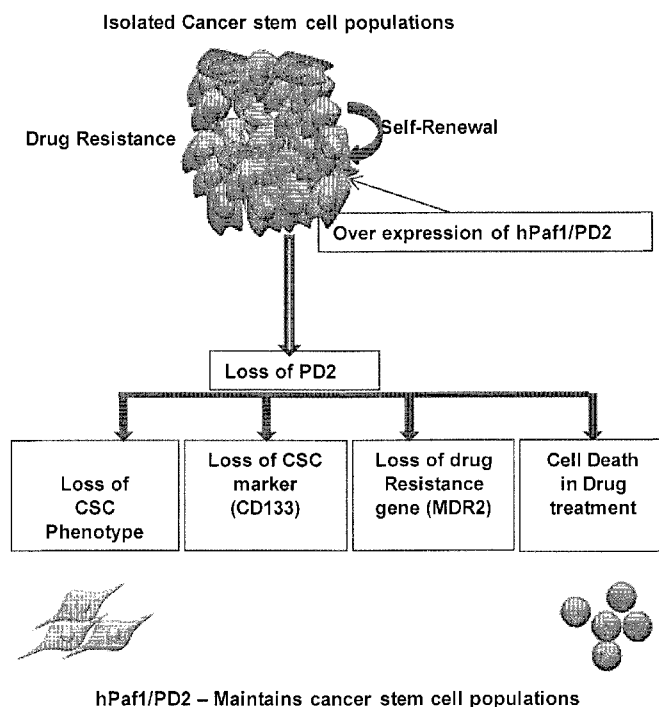


Figure 9

(57) Abstract: Compositions and methods for treating, detecting, and diagnosing cancer are disclosed. In one embodiment, a method is disclosed for treating a drug resistant cancer in a subject by administering at least one human polymerase associated factor/pancreatic differentiation 2 (hPafl/PD2) antagonist to said subject, and administering at least one chemotherapeutic agent to said subject. In another embodiment, a method of identifying cancer stem cells in a population of cells by measuring the expression of hPafl/PD2 or hPafl/PD2 encoding nucleic acids in said cells, wherein the cells over-expressing hPafl/PD2 or hPafl/PD2 encoding nucleic acids compared to other cells in said population are the cancer stem cells.



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B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC(8) - A61K 31/7105; C07H21/00, 21/02; C12N 15/113 (2012.01) USPC - 435/455; 514/44A, 44R; 536/22.1, 23.1, 24.5 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) PatBase, PubMed, GeneCore		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,680,196 B1 (BATRA et al) 20 January 2004 (20.01.2004) entire document	11, 12
Y		4, 9, 10
Y	US 2010/0305188 A1 (NAKANO et al) 02 December 2010 (02.12.2010) entire document	1-8, 13, 14
Y	US 2009/0227533 A1 (BADER et al) 10 September 2009 (10.09.2009) entire document	1-8, 13, 14
Y	US 2009/0297536 A1 (CHIN et al) 03 December 2009 (03.12.2009) entire document	5
Y	PONNUSAMY et al. RNA polymerase II associated factor 1/PD2 maintains self-renewal by its interaction with Oct3/4 in mouse embryonic stem cells. Stem Cells (09.10.2009) 27, 3001-3011. entire document	9, 10
A	MONIAUX et al. The human homologue of the RNA polymerase II-associated factor 1 (hPaf1), localized on the 19q13 amplicon, is associated with tumorigenesis. Oncogene (20.02.2006) 25, 3247-3257. entire document	1-14
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