



US 20110104183A1

(19) United States

(12) Patent Application Publication

Berkx et al.

(10) Pub. No.: US 2011/0104183 A1

(43) Pub. Date: May 5, 2011

(54) USE OF SIP1 AS DETERMINANT OF BREAST CANCER STEMNESS

(75) Inventors: **Geert Berkx**, Linter-Wommersom (BE); **Cindy Vandewalle**, Gent (BE); **Eric Raspe**, Mouscron (BE)(73) Assignees: **VIB VZW**, Gent (BE); **UNIVERSITEIT GENT**, Gent (BE)(21) Appl. No.: **12/735,984**(22) PCT Filed: **Feb. 26, 2009**(86) PCT No.: **PCT/EP2009/052304**§ 371 (c)(1),
(2), (4) Date: **Nov. 16, 2010**

Related U.S. Application Data

(60) Provisional application No. 61/067,511, filed on Feb. 27, 2008.

Publication Classification

(51) Int. Cl.

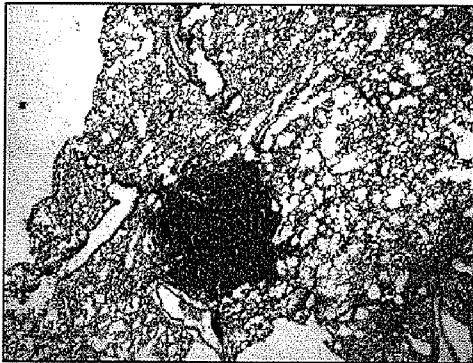
<i>A61K 39/395</i>	(2006.01)
<i>C12Q 1/68</i>	(2006.01)
<i>C12N 5/095</i>	(2010.01)
<i>A61K 31/7105</i>	(2006.01)
<i>G01N 33/574</i>	(2006.01)
<i>A61P 35/00</i>	(2006.01)

(52) U.S. Cl. **424/174.1; 435/6; 435/375; 514/44 A; 435/7.23**

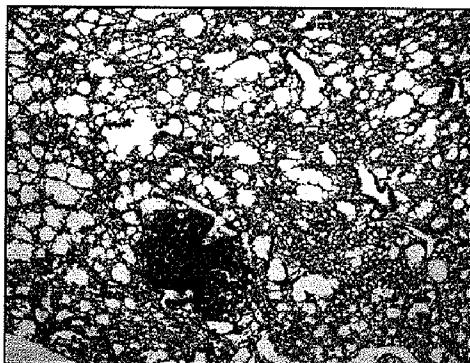
(57) ABSTRACT

The present invention relates to the diagnosis and treatment of cancer. More specifically, it relates to the use of SIP1 nucleic acid and/or protein for the detection of breast cancer stem cells, and the repression of the gene and/or the inactivation of the protein to repress the differentiation of cells into cancer cells and to inhibit metastasis of breast cancer tumors.

231 control
H/E



231 SIP1kd



SIP1

