(54) Title: COMPOSITIONS AND METHODS OF USE OF TARGETING PEPTIDES FOR DIAGNOSIS AND THERAPY

(57) Abstract: The compositions and methods include targeting peptides selective for tissue selective binding, particularly prostate and/or bone cancer, or adipose tissue. The methods may comprise targeting peptides that bind, for example, cell surface GRP78, IL-11Rα in blood vessels of bone, or prohibitin of adipose vascular tissue. These peptides may be used to induce targeted apoptosis in the presence or absence of at least one pro-apoptotic peptide. Antibodies against such targeting peptides, the targeting peptides, or their mimetics may be used for detection, diagnosis and/or staging of a condition, such as prostate cancer or metastatic prostate cancer.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC: A61K 38/00(2006.01);C07H 21/02(2006.01);A01N 37/18(2006.01);C12Q 1/00

USPC: 530/300;536/23.1;514/2;435/4
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
U.S.: 530/300; 536/23.1; 514/2; 435/4

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)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
</table>

Further documents are listed in the continuation of Box C. See patent family annex.

Date of the actual completion of the international search 05 June 2006 (05.06.2006)

Date of mailing of the international search report 12 JUL 2006

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Form PCT/ISA/210 (second sheet) (April 2005)
Continuation of B. FIELDS SEARCHED Item 3:
STIC sequence search, EAST database, STN database (medline, biosis, confici, scisearch, embase, capplus, pcfull and dissabs).