Compositions and Methods Related to Peptides that Selectively Bind Leukemia Cells

The present invention provides additional methods and compositions for the preparation and use of targeting peptides that are selective and/or specific for leukemia. In some embodiments, the invention concerns particular targeting peptides selective or specific for leukemia cells, including but not limited to SEQ ID NO: 5, SEQ ID NO: 6, or SEQ ID NO: 7. Other embodiments concern such targeting peptides attached to therapeutic agents. In other embodiments, leukemia or other targeting peptides may be used to selectively or specifically deliver therapeutic agents to target cells, such as leukemia cells. In certain embodiments, the subject methods concern the identification, preparation, and use of targeting peptides selective or specific for a given target cell, tissue or organ, such as leukemia cells.
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/24414

A. CLASSIFICATION OF SUBJECT MATTER
IPC(S) : A61K 38/00
US CL : 514/12

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.: 514/12

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)
STN, Peptide Databases, EAST

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>
<tbody>
<tr>
<td>X</td>
<td>US 5714577 A (Montelaro et al) 03 February 1998 (03.02.1998) (See, e.g., SEQ IDS 108 and 115, with 21 and 18 residues respectively and comprising YHRLLR)</td>
<td>1-3, 19-22</td>
</tr>
<tr>
<td>X</td>
<td>US 20030354375 A (Rosen et al) 20 March 2003 (20.03.2003) (See, e.g., SEQ ID NO 798, 42 amino acid long, comprising FYLRS, and, e.g., paragraphs 54[1], 59[3], 59[5], 608, [638]-[639], [766]-[767], [793]-[795], [809]-[813], [841]-[862])</td>
<td>1-3, 7-10, 19-22, 26-37, 41-55</td>
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<tr>
<td>Y</td>
<td></td>
<td>4-6, 11-18, 23-25, 38-40</td>
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</tbody>
</table>

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

* Special categories of cited documents:
** later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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**O document referring to an oral disclosure, use, exhibition or other means
**P document published prior to the international filing date but later than the priority date claimed

Date of the actual completion of the international search: 23 November 2005 (23.11.2005)
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