(54) Title: ANTI-IGF-I RECEPTOR ANTIBODY

(57) Abstract: Antibodies, humanized antibodies, resurfaced antibodies, antibody fragments, derivatized antibodies, and conjugates of same with cytotoxic agents, which specifically bind to, and inhibit, insulin-like growth factor-I receptor, antagonize the effects of IGF-I, IGF-II and serum on the growth and survival of tumor cells, and which are substantially devoid of agonist activity. Said antibodies and fragments thereof may be used in the treatment of tumors that express elevated levels of IGF-I receptor, such as breast cancer, colon cancer, lung cancer, prostate cancer, ovarian carcinoma, synovial sarcoma and pancreatic cancer, and said derivatized antibodies may be used in the diagnosis and imaging of tumors that express elevated levels of IGF-I receptor.
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/16211

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07K 16/00; A61K 39/395; C07H 21/04; C12N 15/00, 21/00
US CL : 530/387.3, 388.22, 388.8; 424/133.1, 143.1, 155.1; 536/23.53; 435/69.1, 70.21

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. : 530/387.3, 388.22, 388.8; 424/133.1, 143.1, 155.1; 536/23.53; 435/69.1, 70.21

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>
<tbody>
<tr>
<td>X</td>
<td>WO 00/34780 A1 (NOVARTIS AG) 15 June 2000 (15.06.2002), see page 15, SEQ Id No. 10 last seven residues of first row of Seq 10. MALONEY et al. An anti-insulin-like growth factor I receptor antibody that is a potent inhibitor of cancer cell proliferation. Cancer Research. 15 August 2003, Vol. 63, No. 16:5073-5083. See entire document.</td>
<td>6</td>
</tr>
<tr>
<td>A</td>
<td></td>
<td>1-61</td>
</tr>
</tbody>
</table>

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"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

"T" 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

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

Date of the actual completion of the international search
22 July 2004 (22.07.2004)

Date of mailing of the international search report
06 AUG 2004

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703) 872-9306

Authorized officer
David J. Blanchard
Telephone No. (571) 272-1600

Form PCT/ISA/210 (second sheet) (July 1998)
Continuation of B. FIELDS SEARCHED Item 3:
WEST, Medline, Biosis, EMBASE, Cancerlit, Geneseq, issued and published patents, PIR 78, Swissprot, SPTREMBL.
Search terms: SEQ ID NOS:1-13, IGF-I, IGF-IR, antibody, EM164, PTA-4457, humanized.