Title: DETECTING HUMAN ANTI-THERAPEUTIC ANTIBODIES

Abstract: The invention provides a method for detecting the presence of anti-therapeutic antibody antibodies in a patient being treated with a therapeutic antibody. In one aspect of the invention, the invention is implemented by the following steps: (i) providing a first therapeutic antibody having a molecular tag attached thereto by a cleavable linkage, the molecular tag having one or more predetermined separation characteristics; (ii) providing a second therapeutic antibody having a cleavage-inducing moiety attached thereto, the cleavage-inducing moiety having an effective proximity; (iii) combining in an assay mixture the sample, the first therapeutic antibody, and the second therapeutic antibody under condition such that the first and second therapeutic antibodies form a complex with an anti-therapeutic antibody wherein the cleavable linkage of the first therapeutic antibody is within the effective proximity of the cleavage-inducing moiety of the second therapeutic antibody and molecular tags are released; and (iv) separating from the assay mixture and detecting the released molecular tags to determine the presence or absence of anti-therapeutic antibodies in the sample.
## INTERNATIONAL SEARCH REPORT

### A. CLASSIFICATION OF SUBJECT MATTER

<table>
<thead>
<tr>
<th>IPC(7)</th>
<th>G01N 27/26, 33/537</th>
</tr>
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<td>US CL</td>
<td>204/450, 451; 435/7.1, 7.5, 965, 971; 436/536, 537, 538</td>
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</table>

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. | 204/450, 451; 435/7.1, 7.5, 965, 971; 436/536, 537, 538 |

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)

EAST: PHOTOCLEAV$4$ NEAR2 (BOND$4$ OR LINK$4$)

### 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>
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<tbody>
<tr>
<td>Y</td>
<td>US 4,945,042 A (GEOGER et al) 31 July 1990. See col. 9, line 9-col. 10, line 22.</td>
<td>1-11</td>
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<td>Y</td>
<td>US 6,027,890 A (VAN NESS et al) 22 February 2000. See col. 33, line 52-col. 36, line 22; col. 45, line 41-col. 36, line 22; col. 58, line 67, line 11.</td>
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<td>Y</td>
<td>US 6,127,526 A (BLANK) 03 October 2000. See col. 6, lines 1-22.</td>
<td>8-11</td>
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</table>

Further documents are listed in the continuation of Box C.

Date of the actual completion of the international search

19 August 2005 (19.08.2005)

Name and mailing address of the ISA/US

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Date of mailing of the international search report

28 OCT 2005

Authorized Signer

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