Abstract

The present invention discloses genes for new variants in E.coli that are more close to the wild type lectin sequence but still differ in surface charges. This recombinant version (exemplified Rec-2 and Rec-3) are cancer cell binding with anti tumor activity show blood group specificity similar to the native lectin but retains the stability and the solubility properties.

Title: CANCER CELL BINDING RECOMBINANT LECTINS WITH ANTITUMOR ACTIVITY AND METHOD OF PREPARATION
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Declarations under Rule 4.17:
— as to the identity of the inventor (Rule 4.17(i))
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
— of inventorship (Rule 4.17(iv))

Published:
— with international search report (Art. 21(3))
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INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

INV. C07K14/37
ADD.

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)
C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practical, search terms used)
EPO-Internal, BIOSIS, Sequence Search, EMBASE, FSTA, WPI Data, CHEM ABS Data

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>
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| A         | MODY RUSTOM ET AL: "Use of Lectins as Diagnostic and Therapeutic Tools for Cancer",
            JOURNAL OF PHARMACOLOGICAL AND TOXICOLOGICAL METHODS, vol. 33, no. 1, 1995, pages 1-10,
            XP002610172, ISSN: 1056-8719 the whole document
|           | WANG ET AL: "Lectins from mushrooms", MYCOLOGICAL RESEARCH, ELSEVIER, GB, vol. 102, no. 8,
            1 August 1998 (1998-08-01), pages 897-906, XP022451362, ISSN: 0953-7562, DOI: DOI:10.1017/S0953756298006200
            the whole document |

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

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  * "P" document published prior to the international filing date but later than the priority date claimed

* The term "priority" means the date of the filing of the priority application.

Date of the actual completion of the international search
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<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>
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<tbody>
<tr>
<td>A</td>
<td>WU ALBERT M ET AL: &quot;Carbohydrate specificity of a lectin isolated from the fungus Sclerotium rolfsii&quot;, LIFE SCIENCES, vol. 69, no. 17, 14 September 2001 (2001-09-14), pages 2039-2050, XP002610173, ISSN: 0024-3205</td>
<td>1-20</td>
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