

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2018/000505

A. CLASSIFICATION OF SUBJECT MATTER

G01N 33/574(2006.01)i, G01N 33/58(2006.01)i, G01N 33/569(2006.01)i, G01N 15/14(2006.01)i

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)

G01N 33/574; C12Q 1/02; G06F 19/00; G01N 33/48; G01N 33/53; G01N 33/58; G01N 33/569; G01N 15/14

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

Korean Utility models and applications for Utility models: IPC as above
Japanese Utility models and applications for Utility models: IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS (KIPO internal) & Keywords: colorectal rectal cancer, peripheral blood, immunocyte, parenchyma cell analysis, auto
bhematology analysis, diagnosis

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | KR 10-1483883 B1 (LEE, Jong Kyun et al.) 19 January 2015 See paragraphs [0064]-[0126]. | 1-5,23 |
| Y | | 6-22 |
| Y | MASUYAMA, J.-I. et al., "Ex Vivo Expansion of Natural Killer Cells from Human Peripheral Blood Mononuclear Cells-co-stimulated with Anti-CD3 and Anti-CD52 Monoclonal Antibodies", <i>Cytotherapy</i> , 2016, vol. 18, pages 80-90 See pages 82-83. | 6-22 |
| A | KR 10-2012-0077568 A (BIOINFRA INC. et al.) 10 July 2012 See the entire document. | 1-23 |
| A | JP 4608704 B2 (TOKYO MEDICAL AND DENTAL UNIV) 12 January 2011 See the entire document. | 1-23 |
| A | JP 2010-145205 A (TOKYO MEDICAL AND DENTAL UNIV) 01 July 2010 See the entire document. | 1-23 |

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

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| * Special categories of cited documents: | "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 |
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| "E" earlier application or patent but published on or after the international filing date | "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 |
| "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) | "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 |
| "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 | "&" document member of the same patent family |


Date of the actual completion of the international search

01 MAY 2018 (01.05.2018)

Date of mailing of the international search report

01 MAY 2018 (01.05.2018)

Name and mailing address of the ISA/KR


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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/KR2018/000505

| Patent document cited in search report | Publication date | Patent family member | Publication date | | |
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| KR 10-1483883 B1 | 19/01/2015 | NONE | | | |
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| | | KR 10-1463588 B1 | 19/11/2014 | | |
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