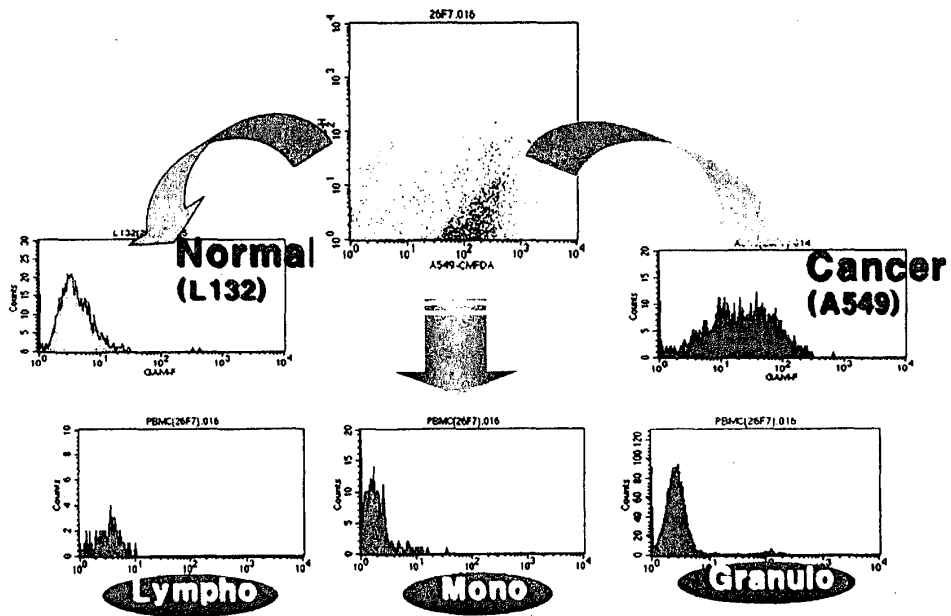
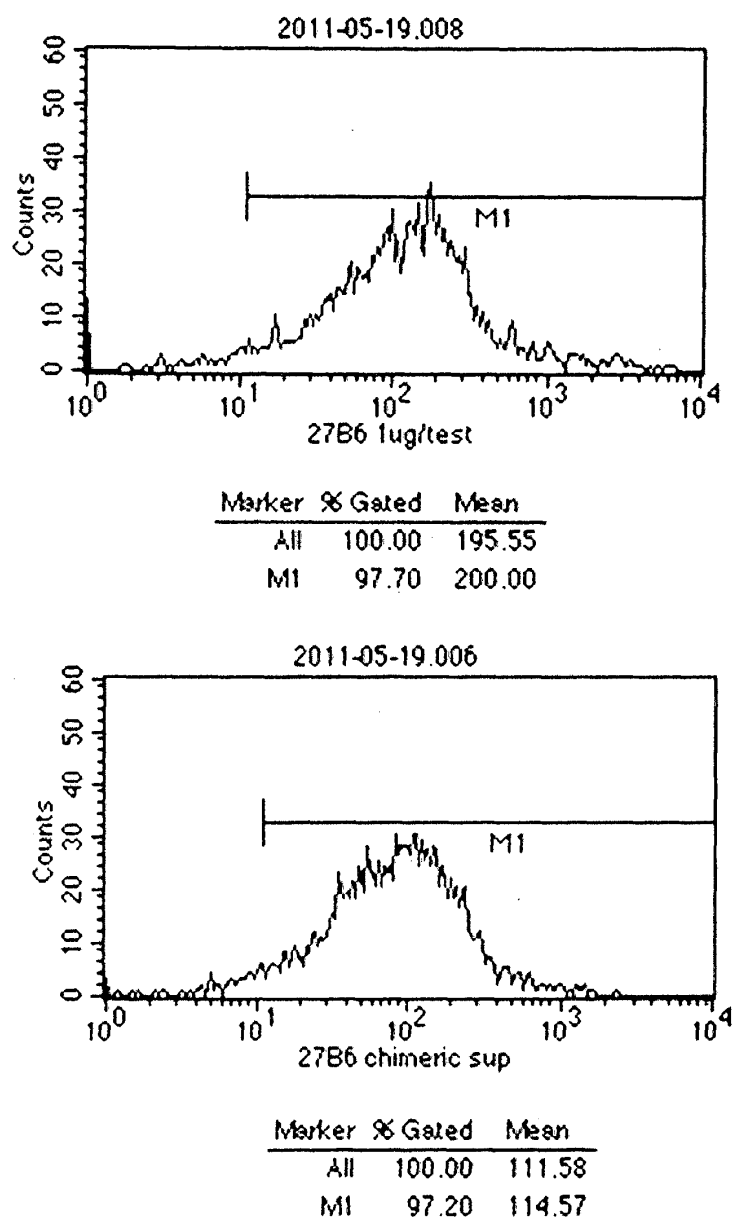


【도면】

【도 1】



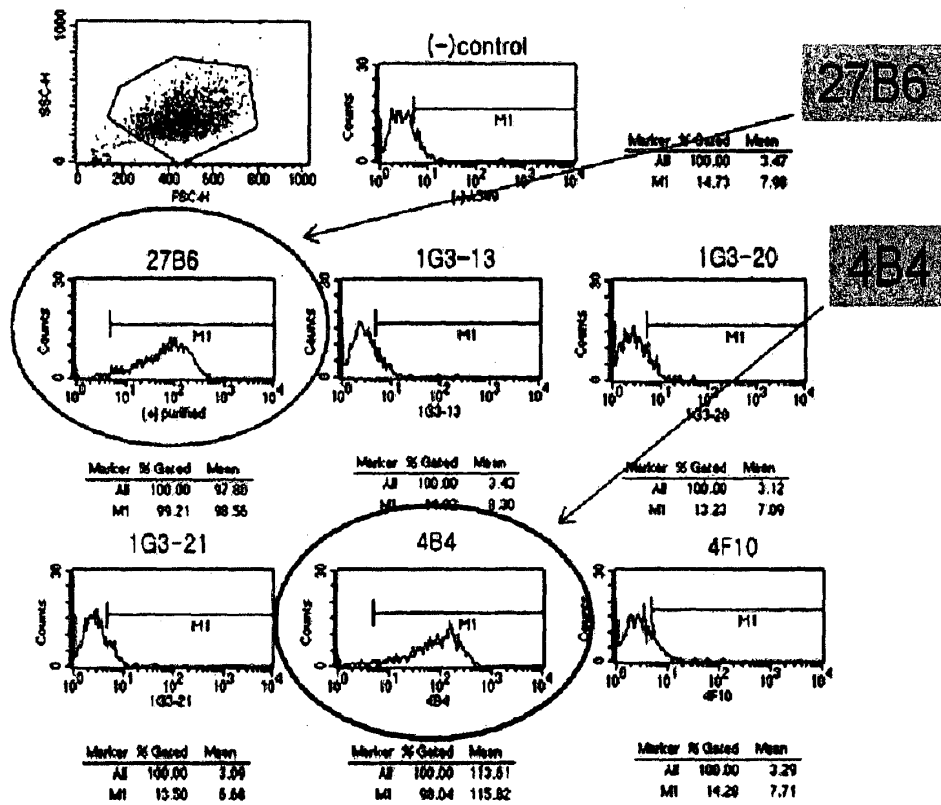
【도 2】



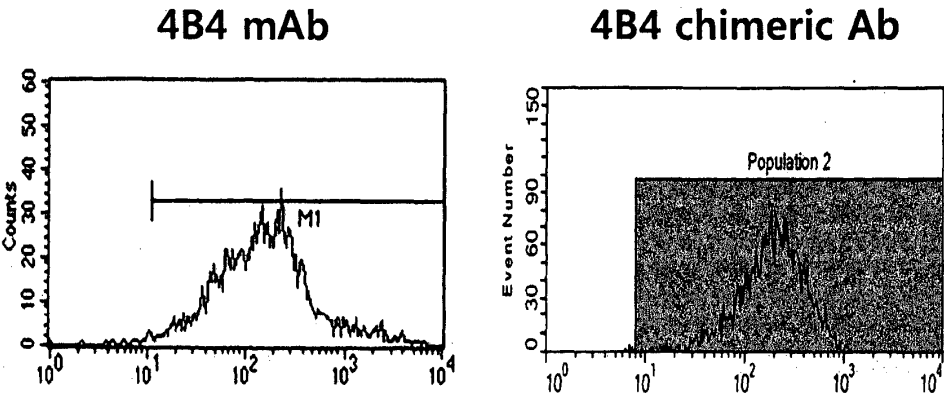
【도 3】

# 27B6 pairing Ab fusion clones screening

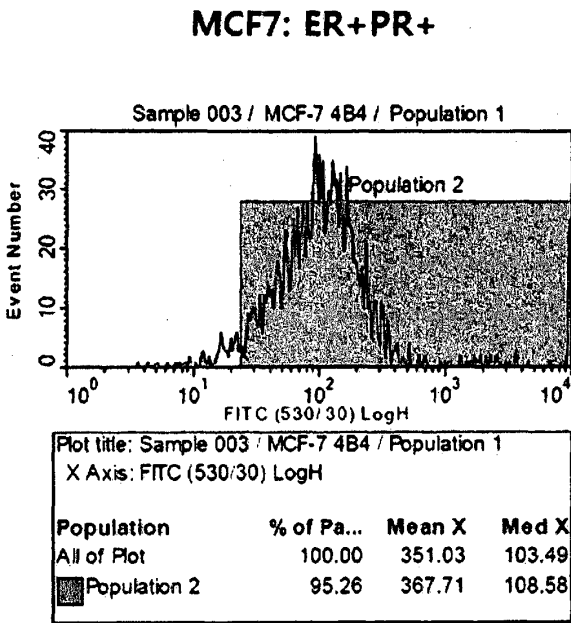
Partner cell: A549-SNU



【도 4】



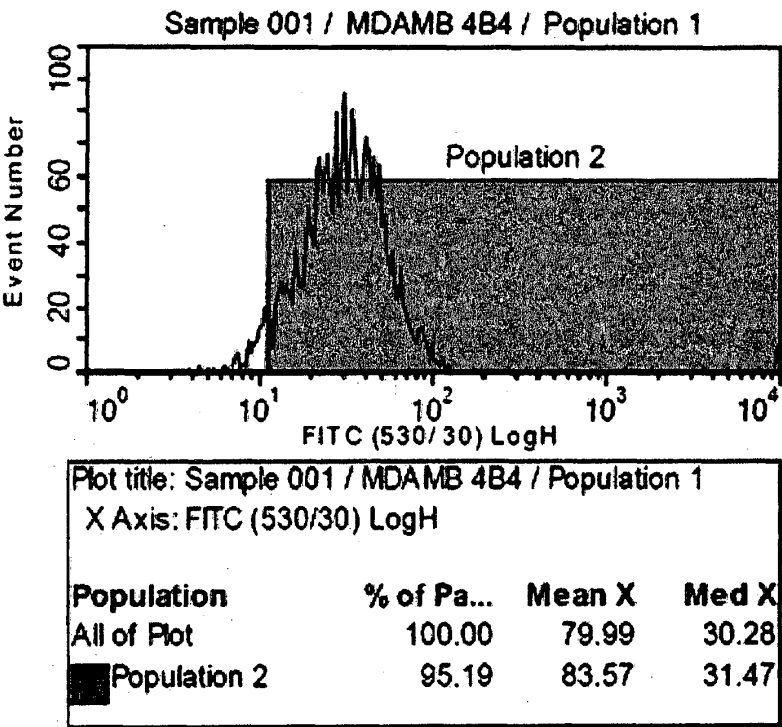
【도 5a】



ER: Estrogen receptor  
PR: Progesterone Receptor  
HER2: human epidermal growth  
factor receptor 2

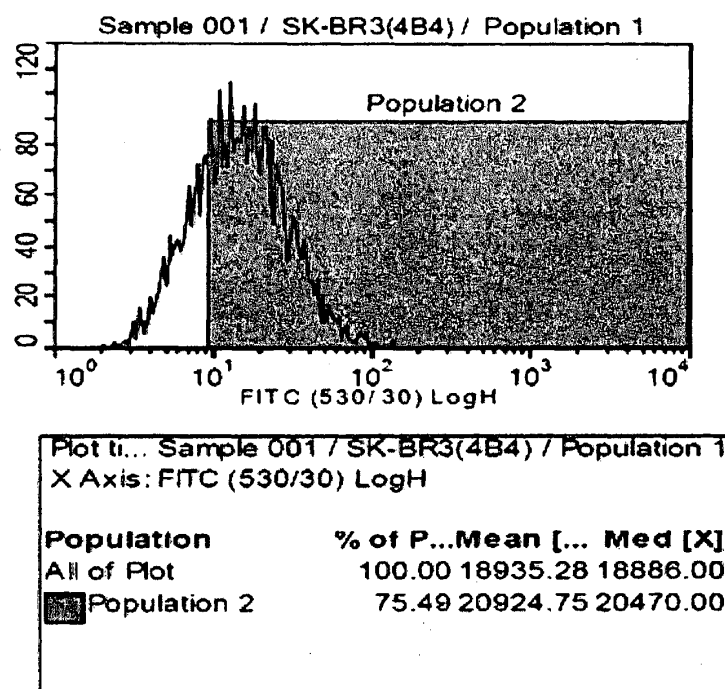
【도 5b】

MDAMB231: triple negative



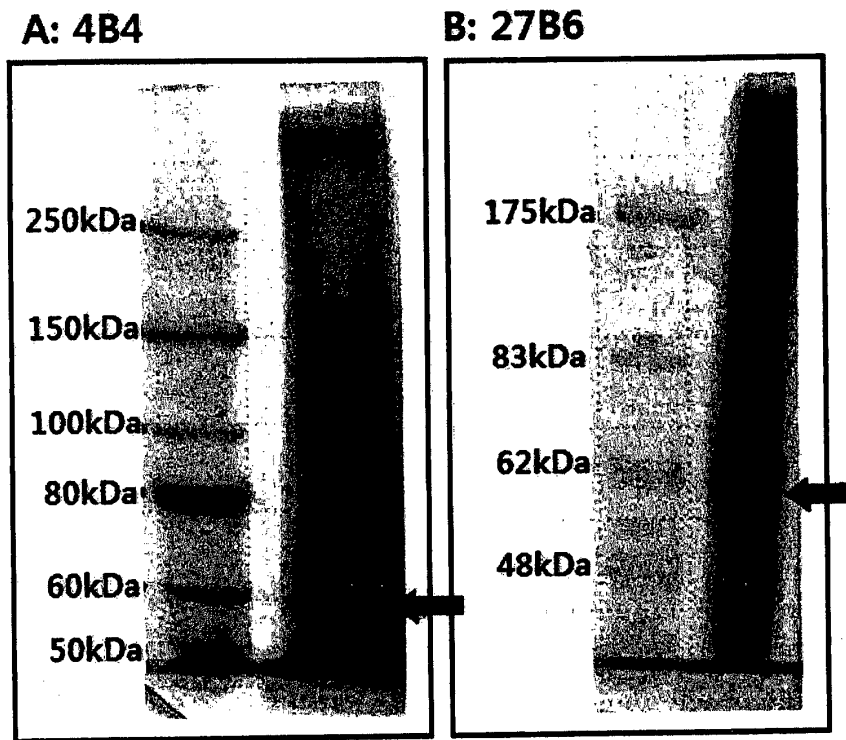
ER: Estrogen receptor  
PR: Progesterone Receptor  
HER2: human epidermal growth  
factor receptor 2

【도 5c】

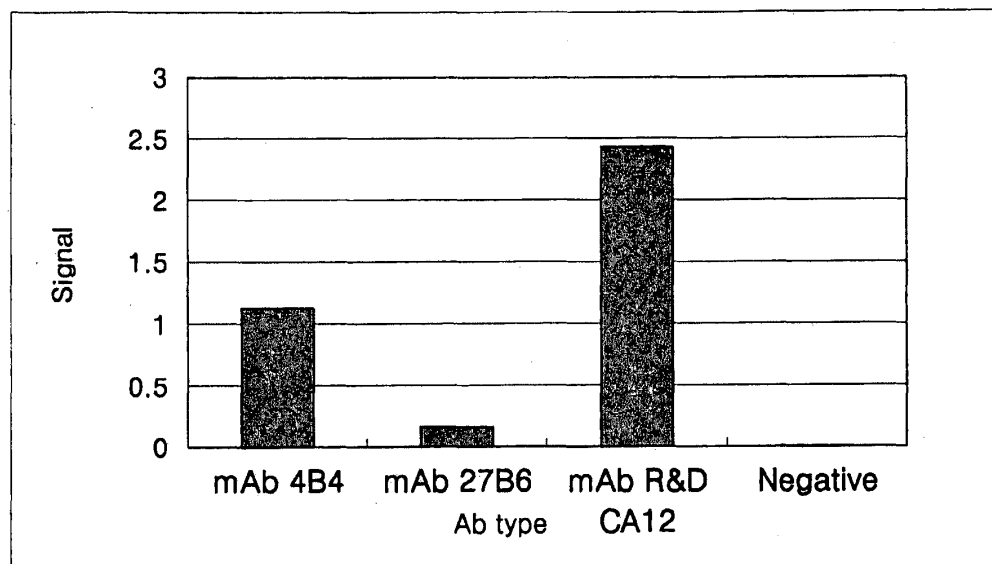
**SKBR3: HER2+**

ER: Estrogen receptor  
PR: Progesterone Receptor  
HER2: human epidermal growth  
factor receptor 2

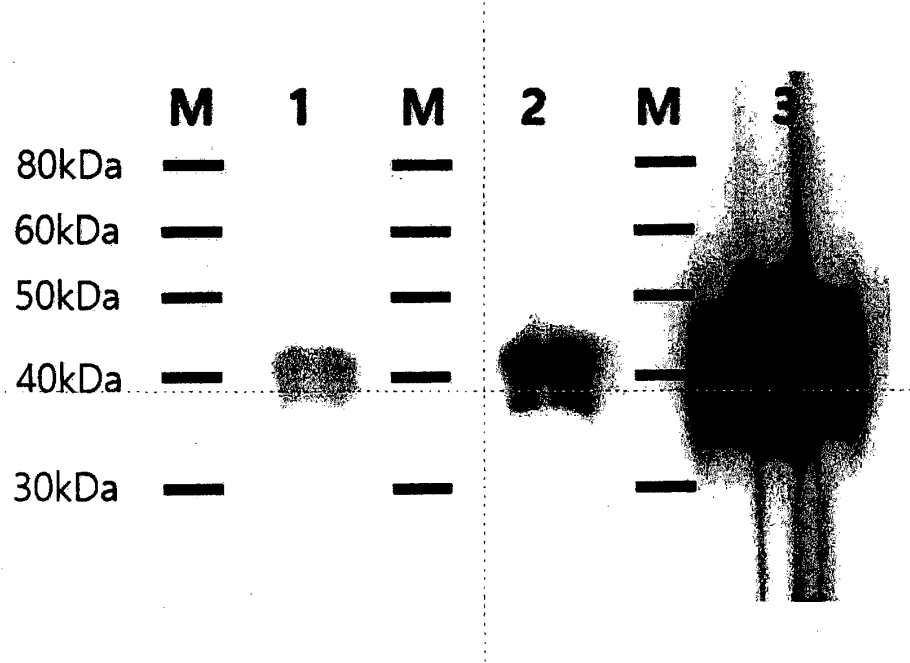
【도 6】



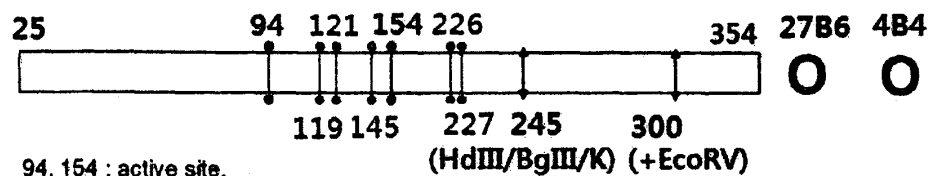
【도 7】



【도 8】



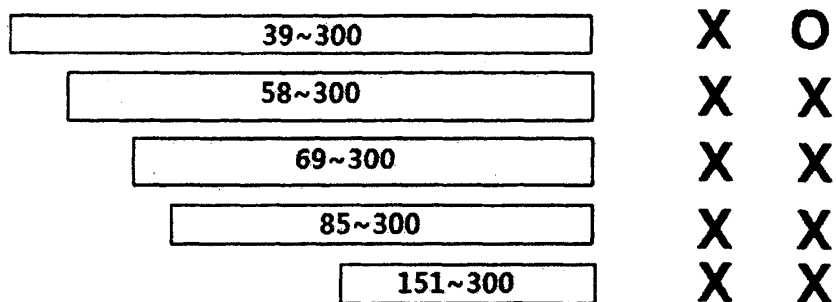
【도 9】



94, 154 : active site,

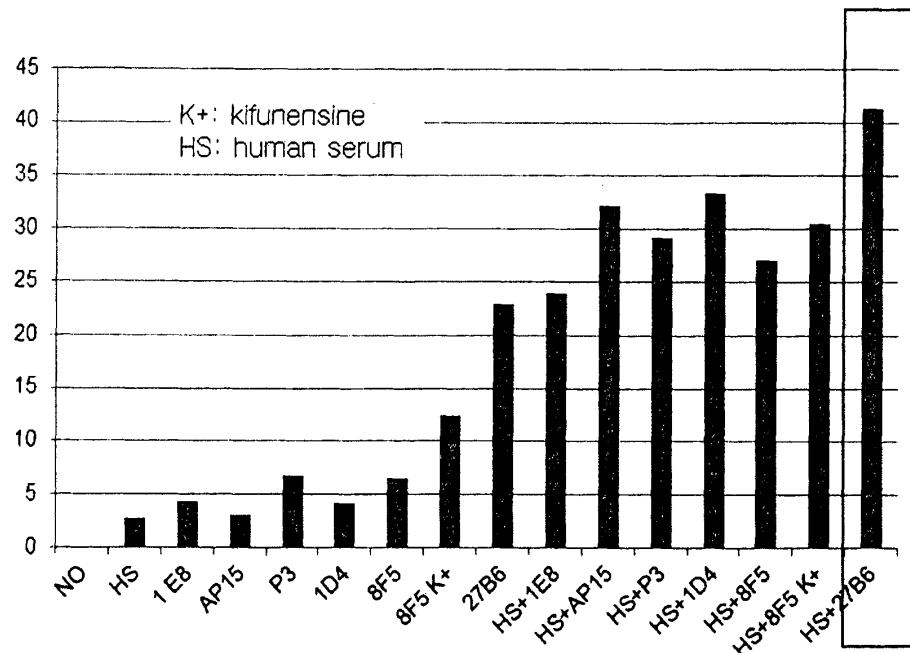
119, 121, 145 : Zinc binding

226, 267: substrate binding

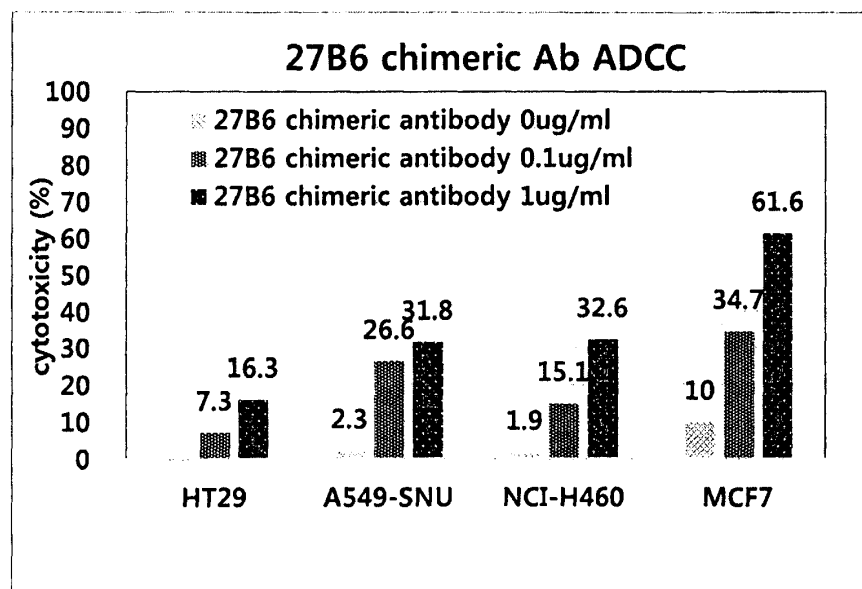


|                  | 4B4          | 27B6         | hlgG         |
|------------------|--------------|--------------|--------------|
| Background       | 0.011        | 0.022        | 0.012        |
| <b>CA12 full</b> | <b>1.991</b> | <b>2.27</b>  | <b>1.827</b> |
| CA12 N85         | 0.013        | 0.01         | 1.1          |
| CA12 N151        | 0.014        | 0.047        | 0.996        |
| <b>CA12 N39</b>  | <b>0.355</b> | <b>0.086</b> | <b>1.828</b> |
| CA12 N58         | 0.02         | 0.021        | 0.026        |
| CA12 N69         | 0.045        | 0.039        | 0.191        |
| mock             | 0.016        | 0.038        | 0.007        |

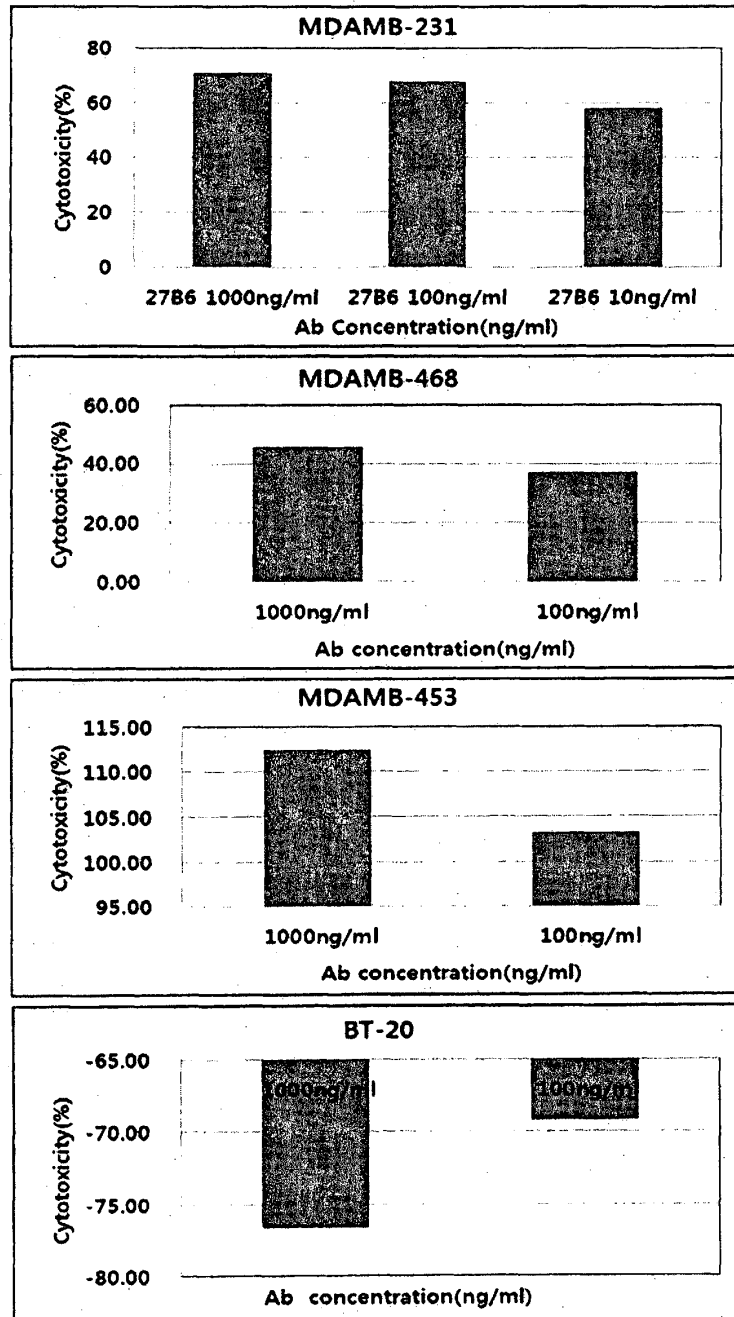
【도 10】



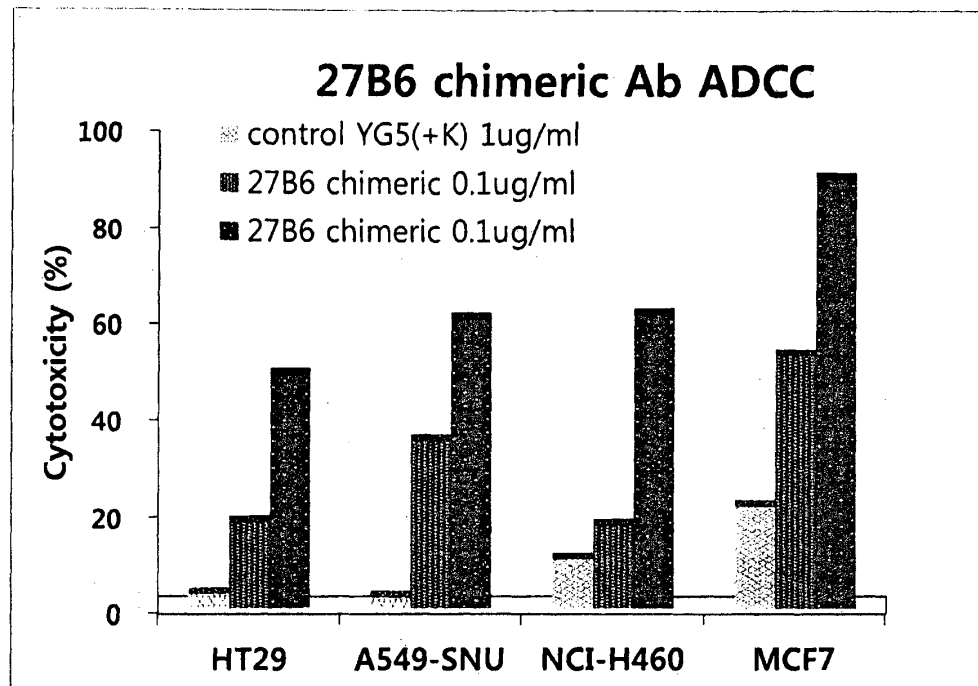
【도 11】



【도 12】



【도 13】



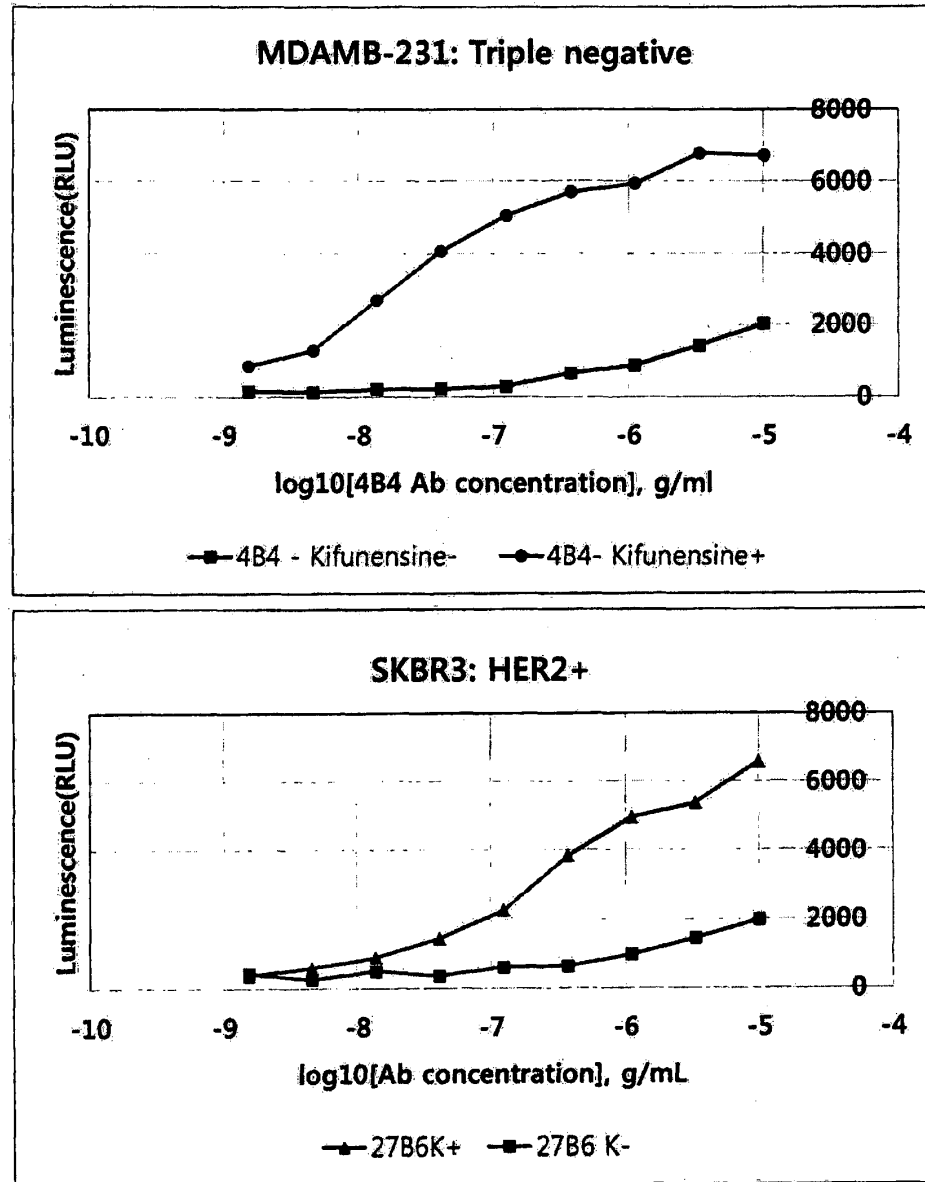
HT29: human colorectal adenocarcinoma

A549: human lung adenocarcinoma

NCI-H460: human non-small cell lung carcinoma

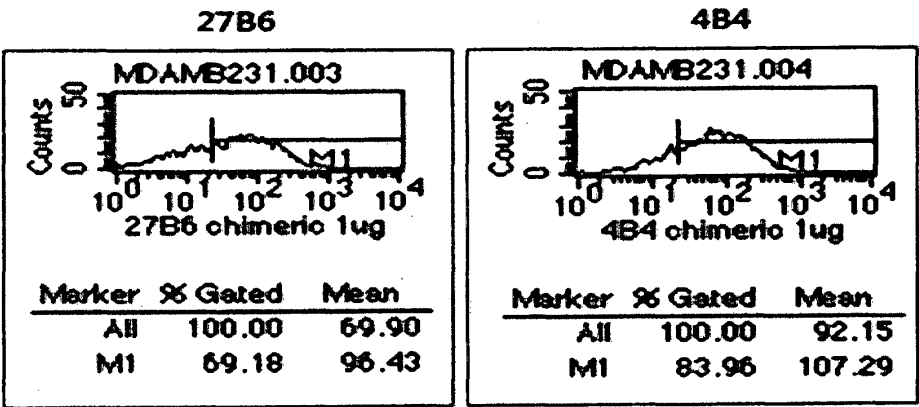
MCF7: human breast adenocarcinoma(ER+/ PR+/ ERBB2-)

【도 14】

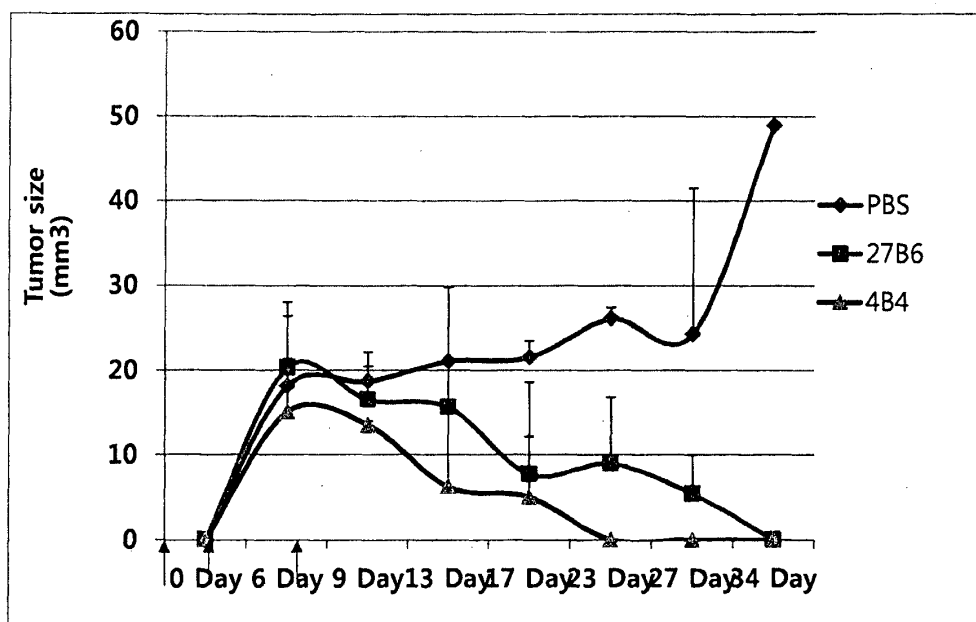


【도 15】

CA12 expression on MDA-MB-231 cells



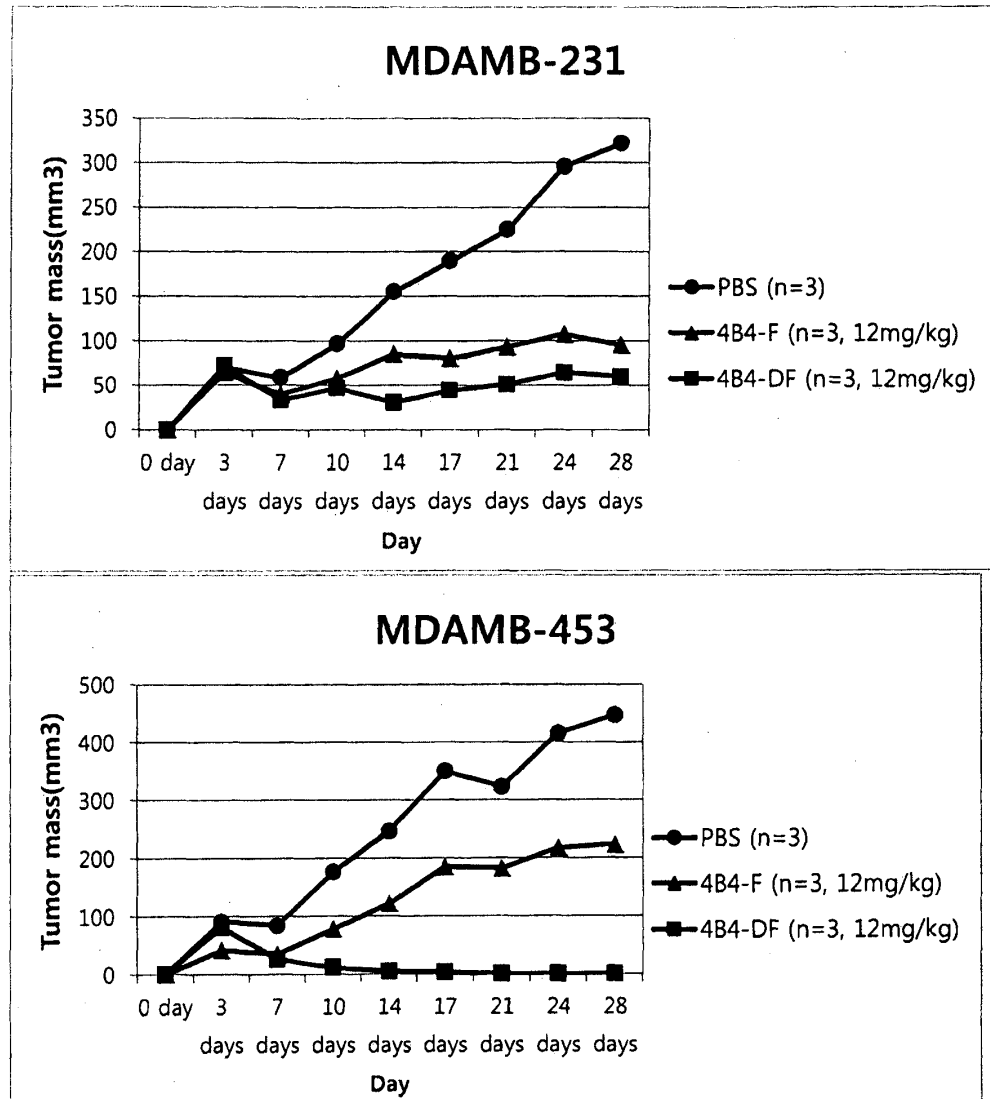
【도 16】



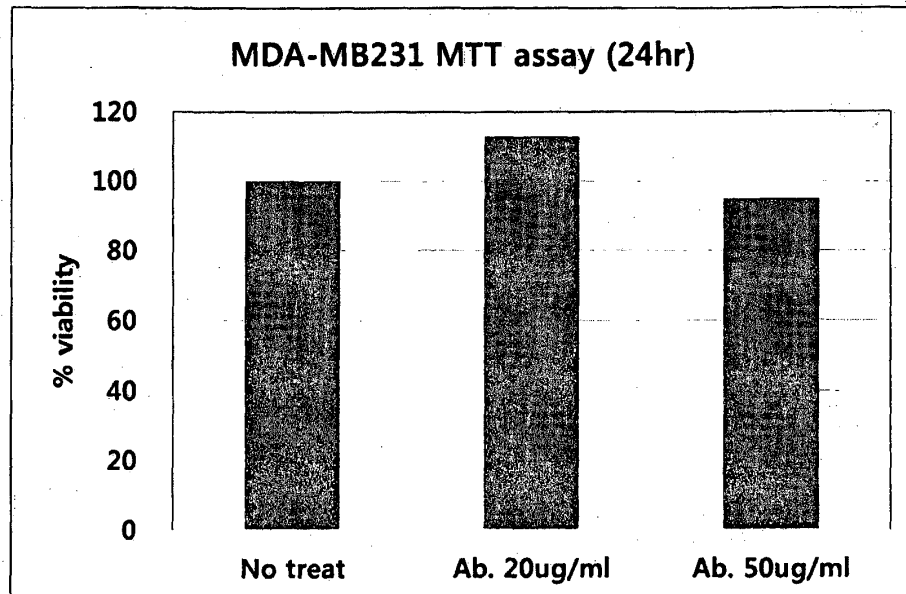
종양세포 접종 후 3일 뒤 부터 치료

|                       |                                                |
|-----------------------|------------------------------------------------|
| Cell line             | MDAMB-231 ( TNBC cell line)                    |
| Cell inoculation No.  | 1*10 <sup>7</sup>                              |
| Injection site        | S.C.-flank                                     |
| Chimeric antibody     | 27B6, 4B4                                      |
| Dose / injection time | 12mg/kg, 3 time injection<br>for 2 weeks/ I.P. |

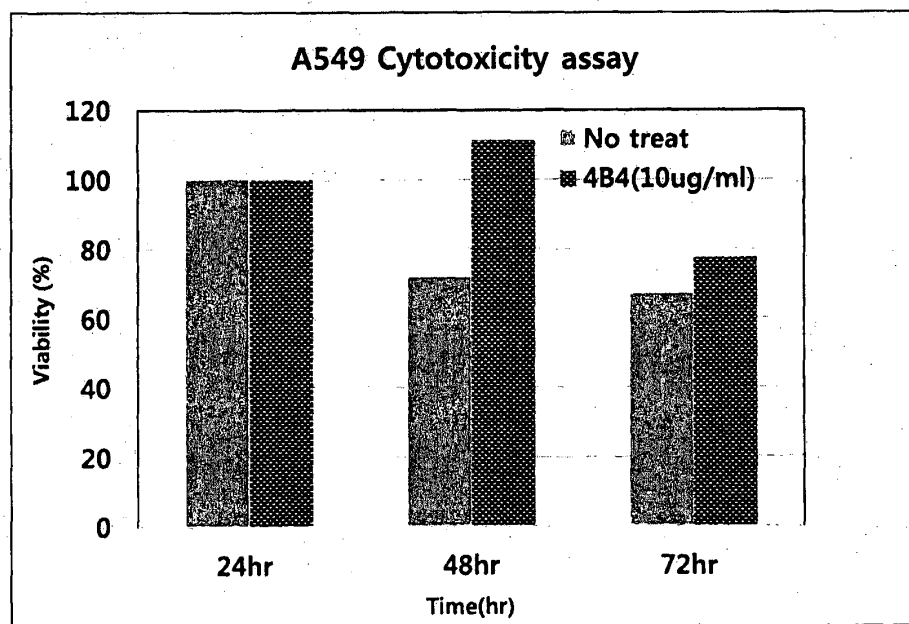
【도 17】



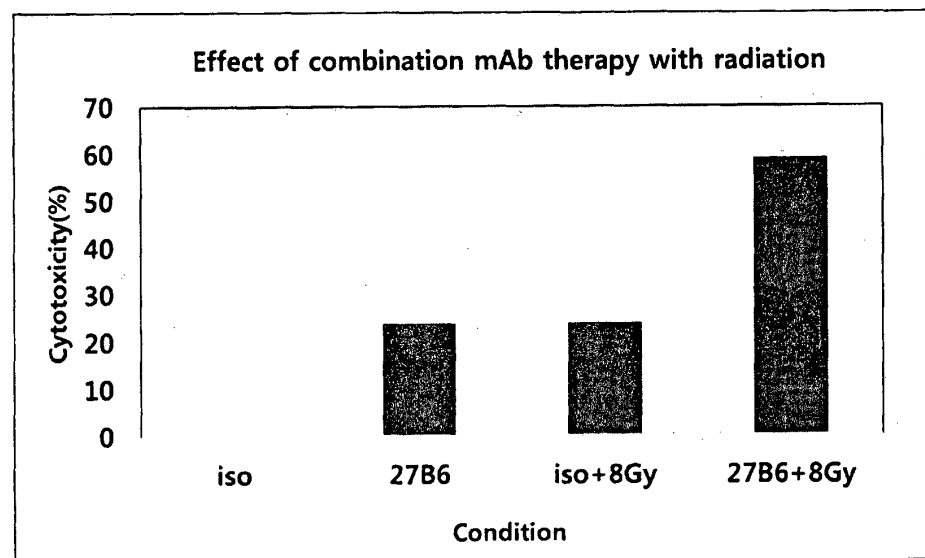
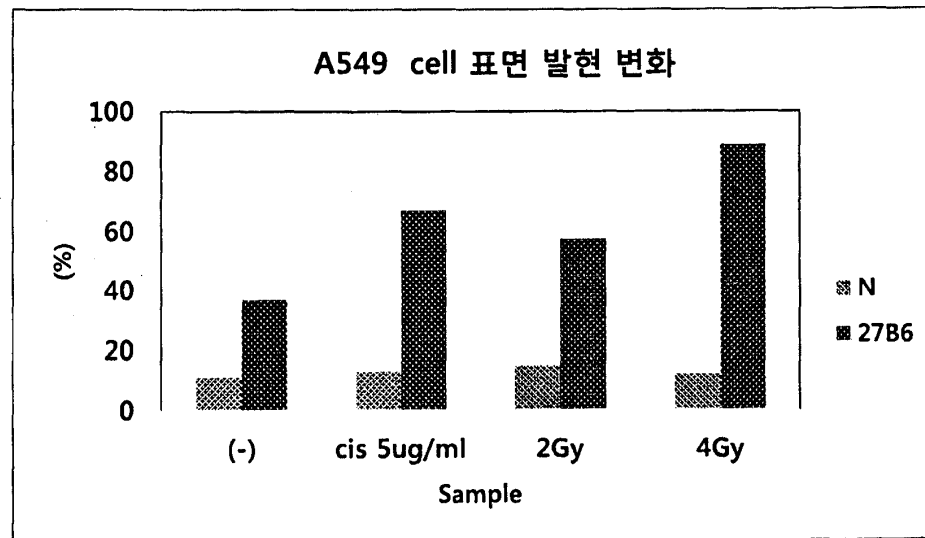
【도 18】



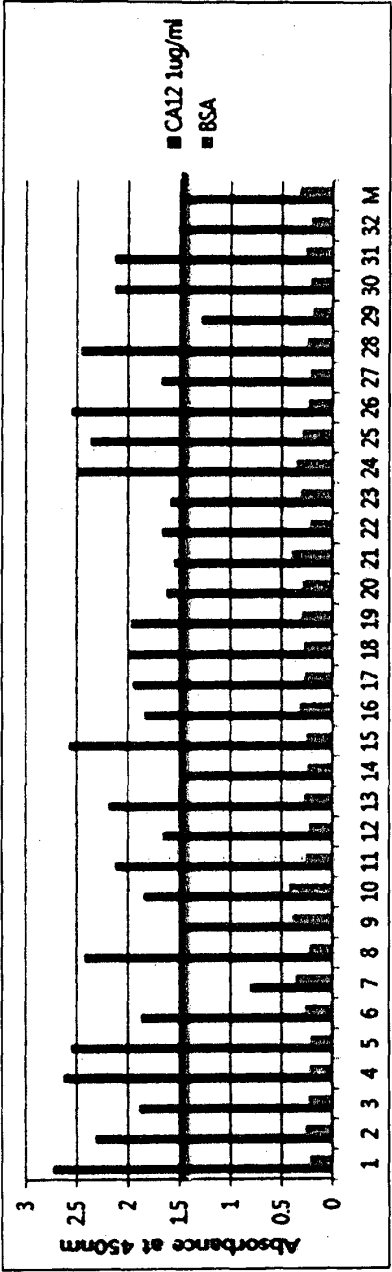
【도 19】



【도 20】



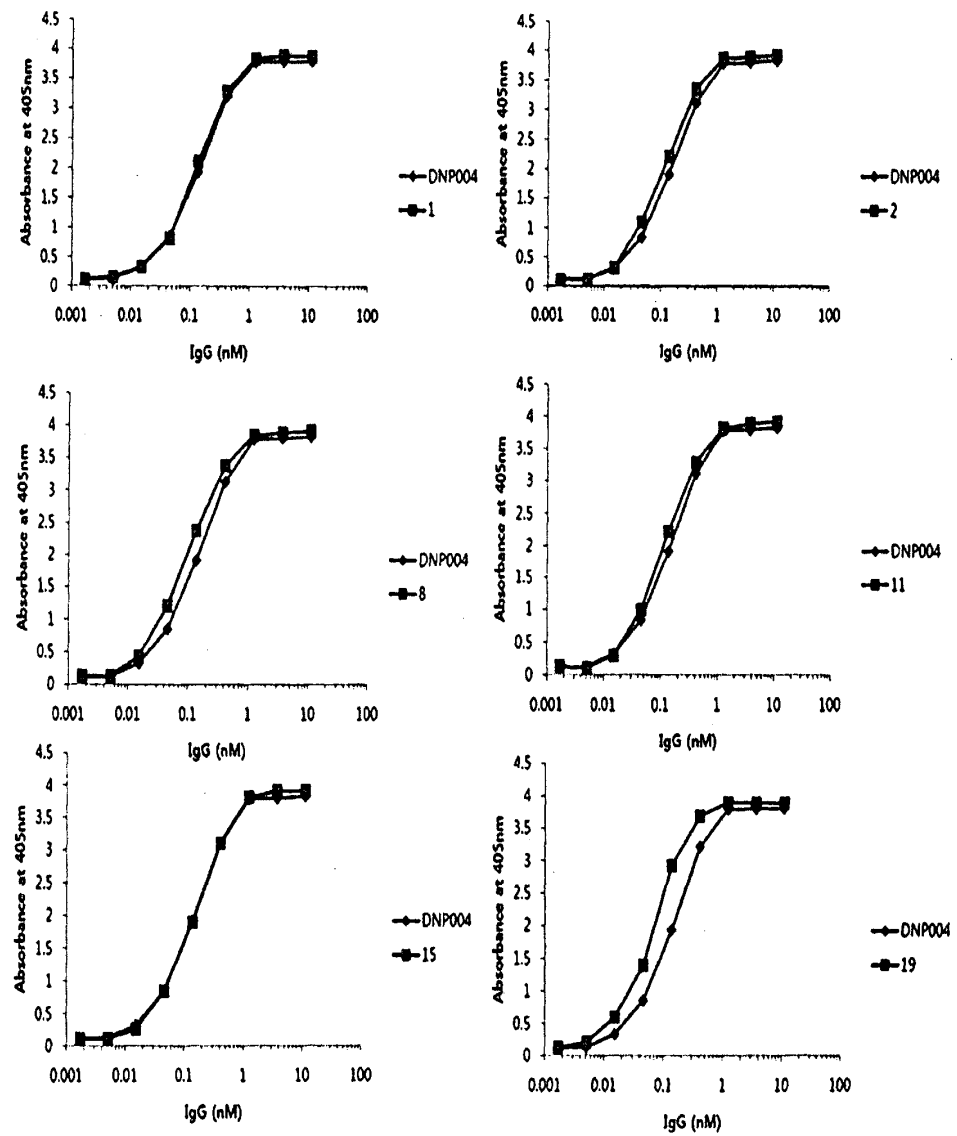
【도 21】



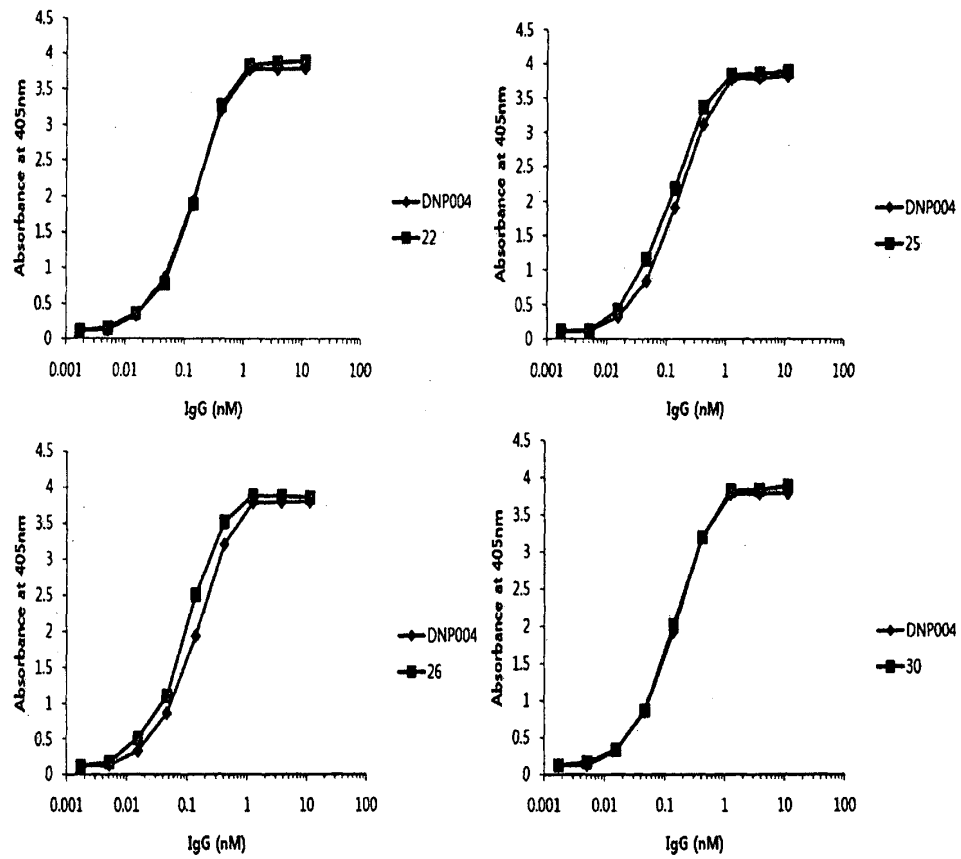
【도 22】

|        |  | LCDR1                                                                                                      |  | LCDR2                                                                                                      |  |
|--------|--|------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------|--|
| DNP004 |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 1      |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 2      |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 8      |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 11     |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 15     |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 19     |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 22     |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 25     |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 26     |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |
| 30     |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  | DIOMTQSPSSLGASVGDRTVITCRASSSVTTHNYQOKPKAPKAPWIIATSSLASVPSRFSGSGSGTDFTLTIISSLOPEDFATYYCQOWSSNPLTTCGGCTKVEIK |  |

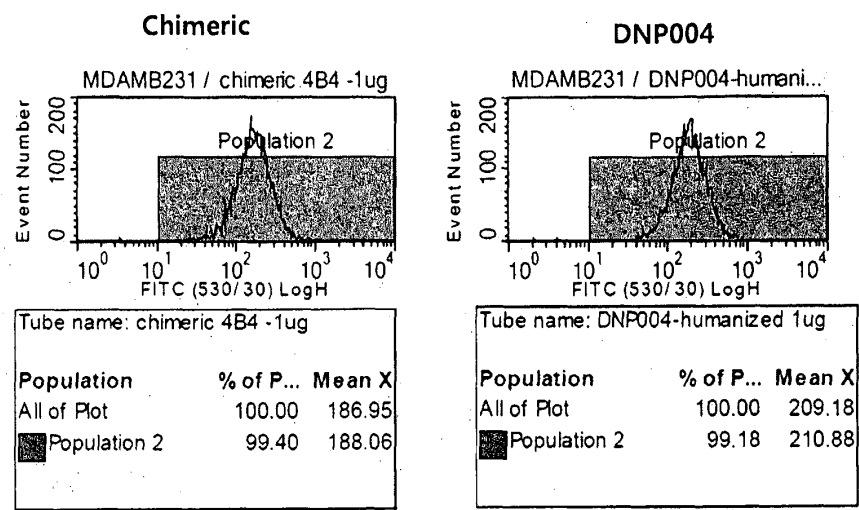
【도 23】



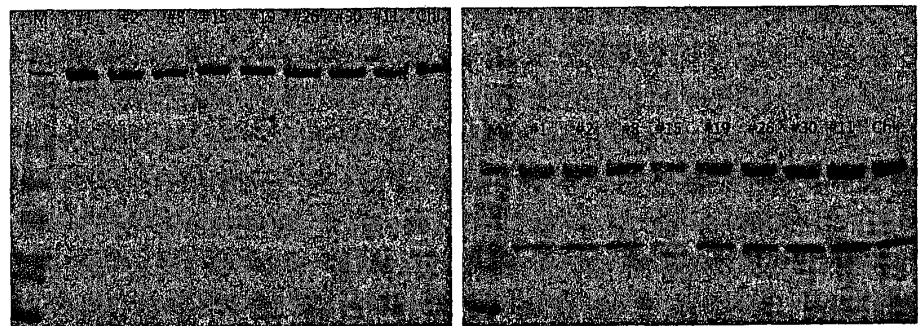
【도 24】



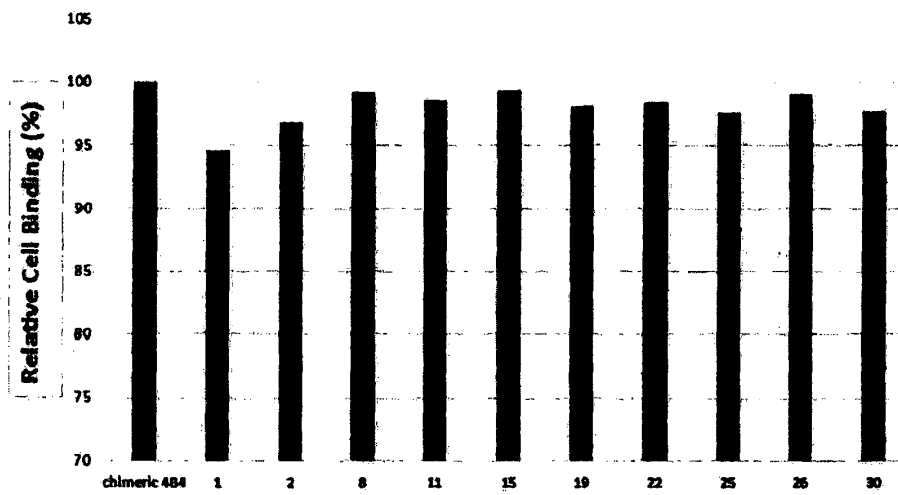
【도 25】



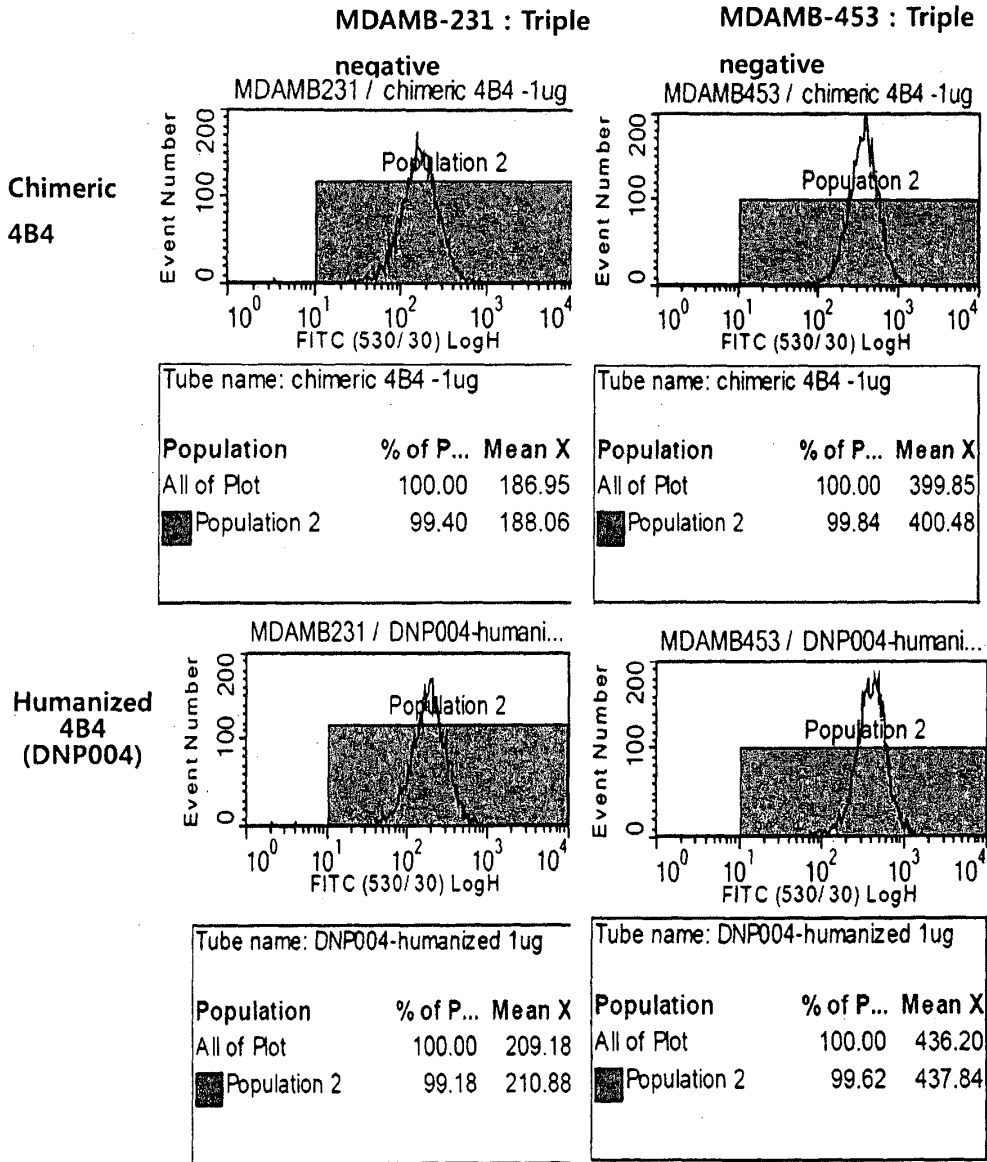
【도 26】



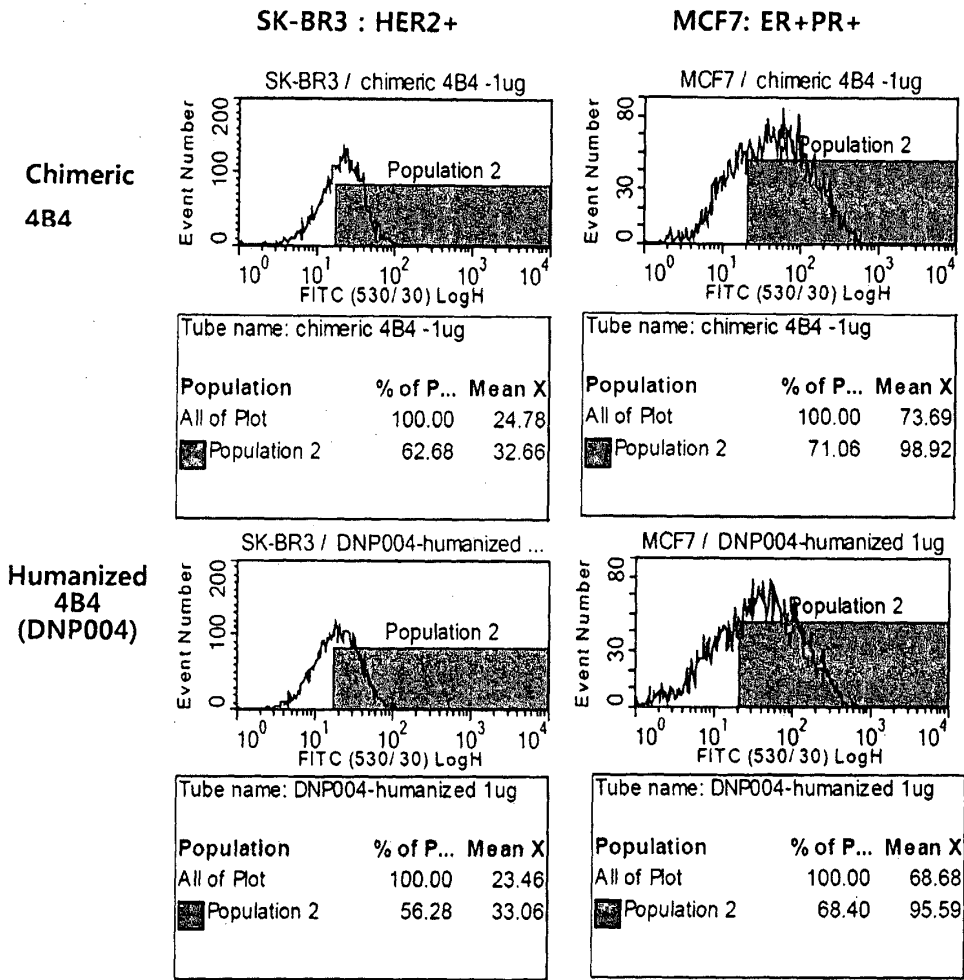
【도 27】



【도 28】

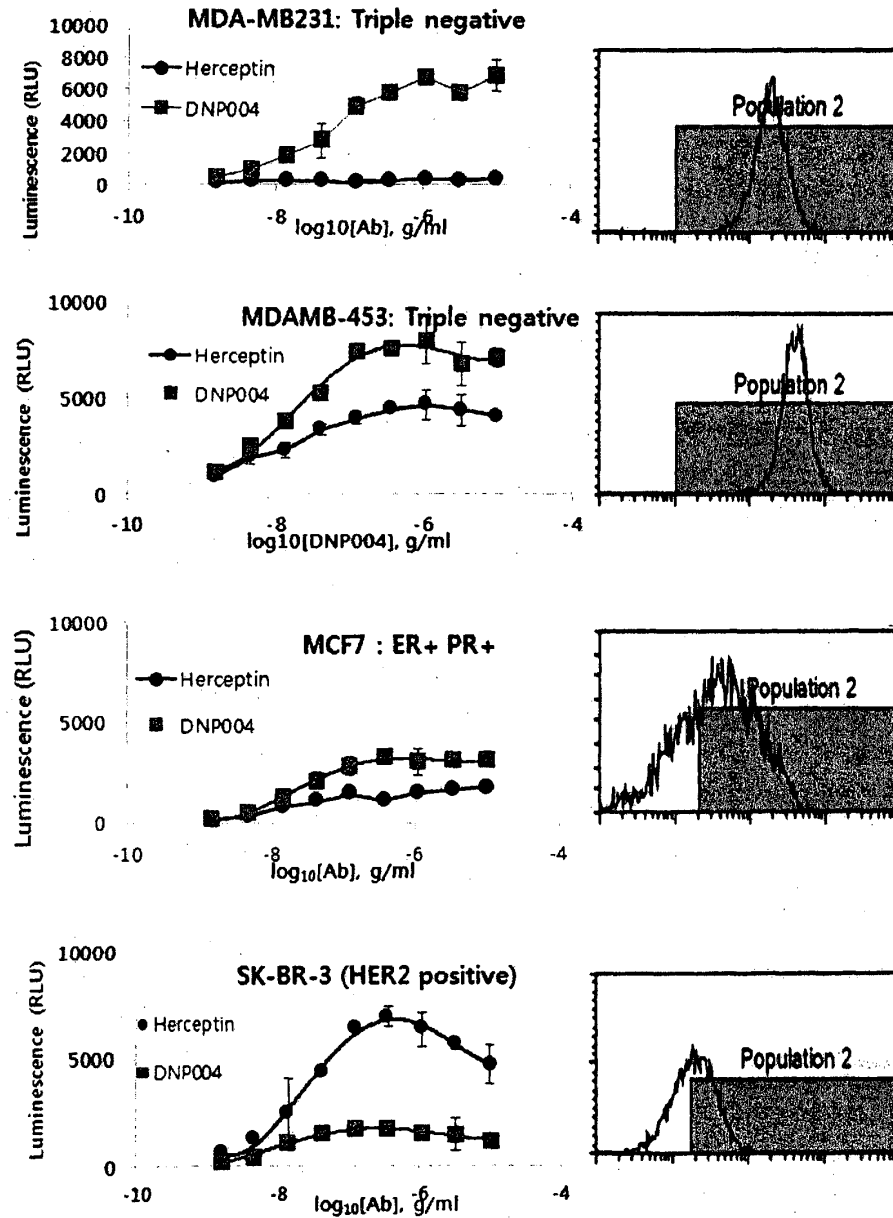


【도 29】

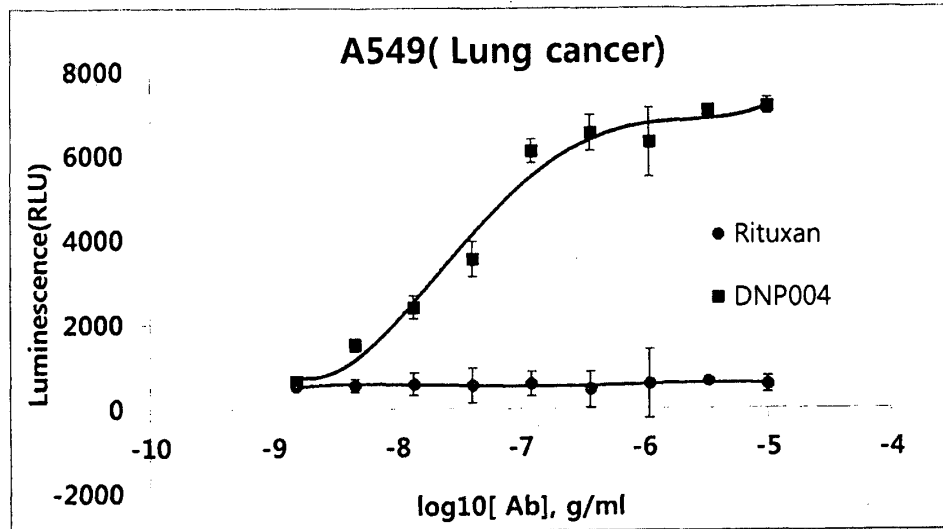


ER: Estrogen receptor  
PR: Progesteron Receptor  
HER2: Human Epidermal Growth Factor Receptor2

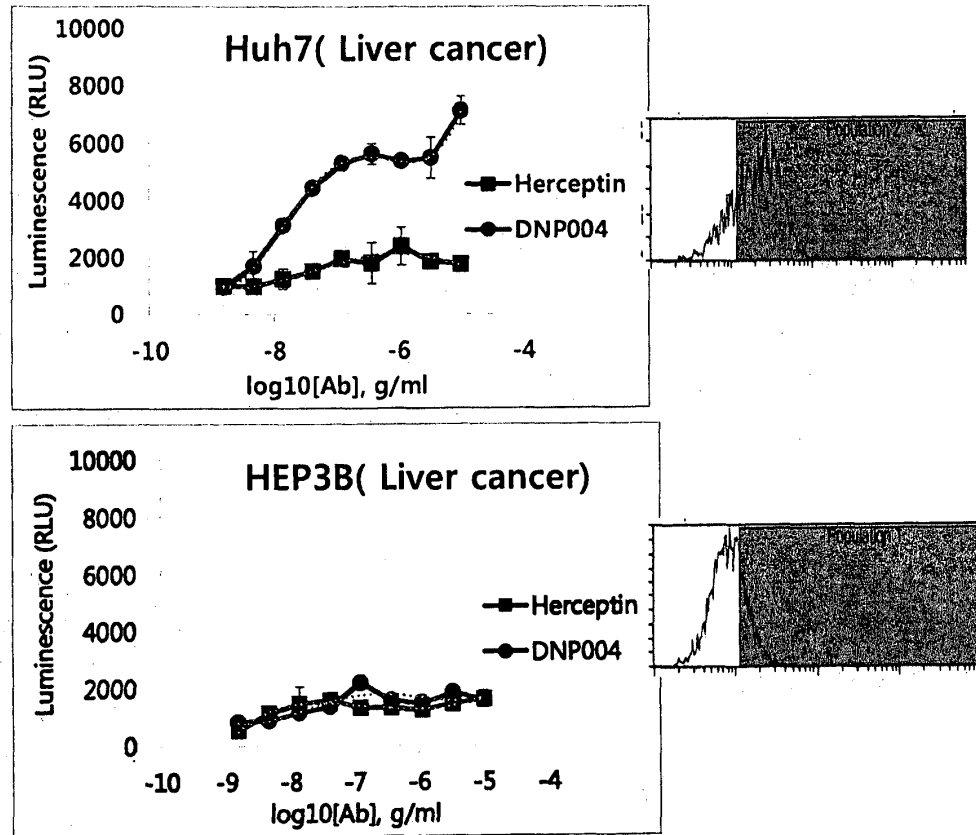
【도 30】



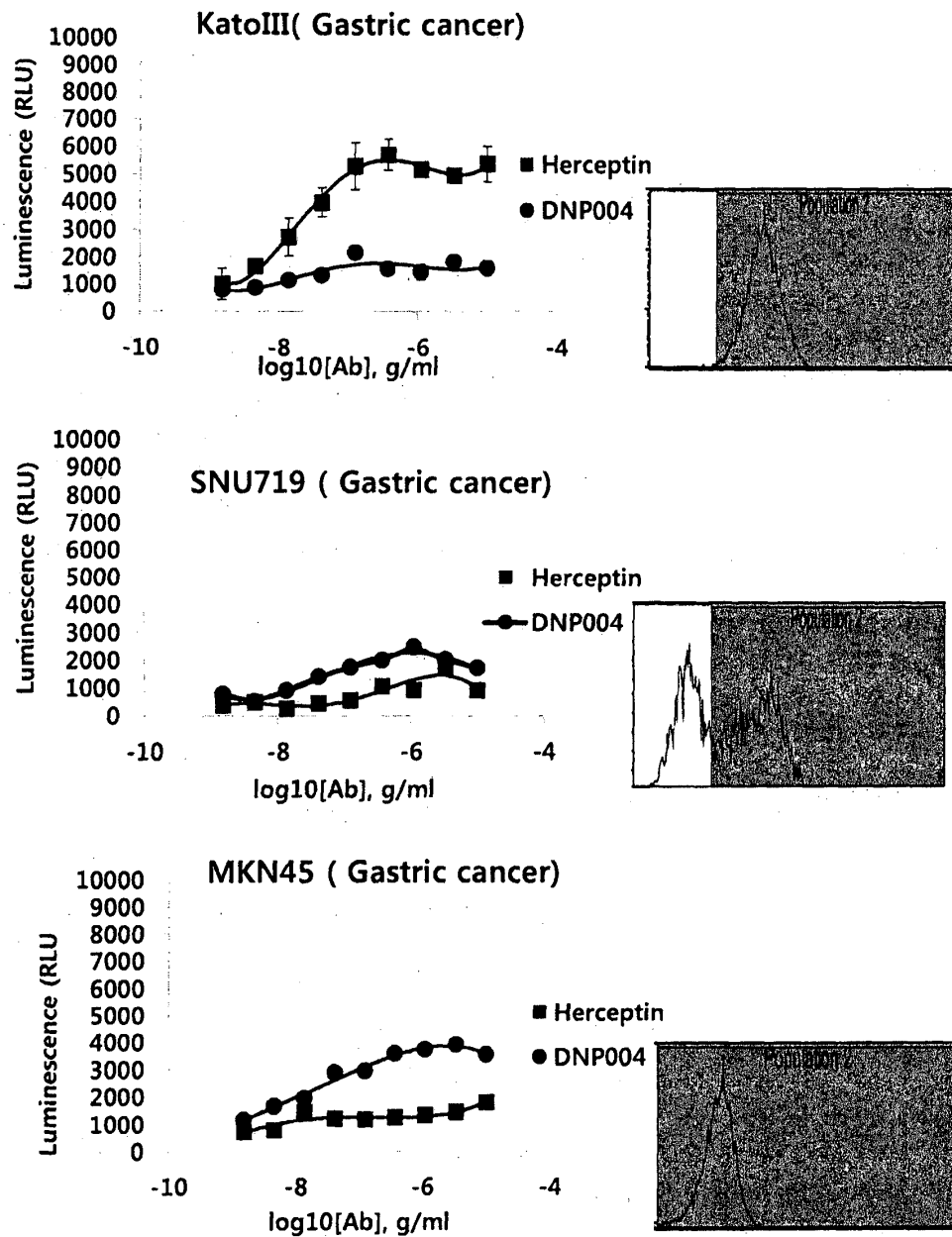
【도 31】



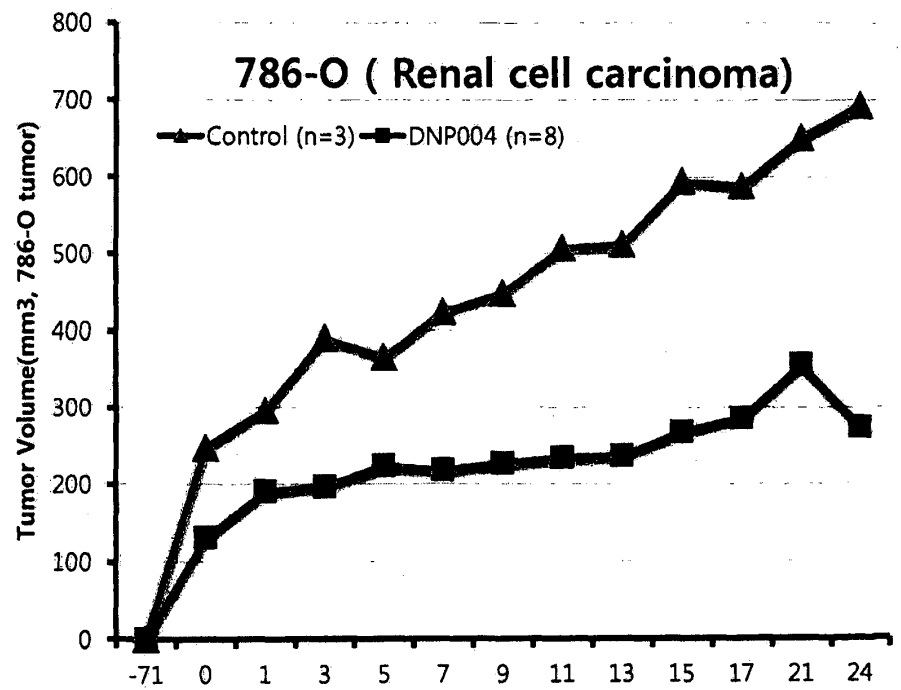
【도 32】



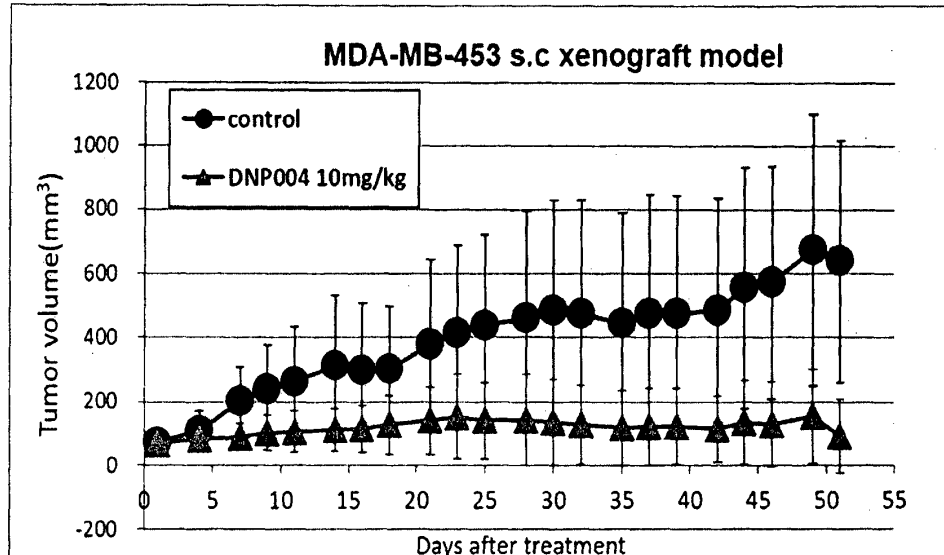
【도 33】



【도 36】



【도 34】



【도 35】

