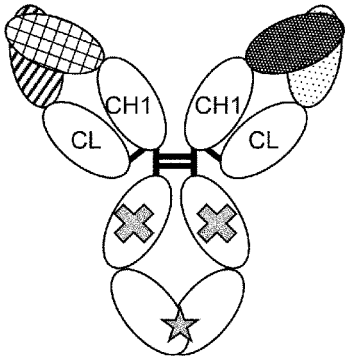
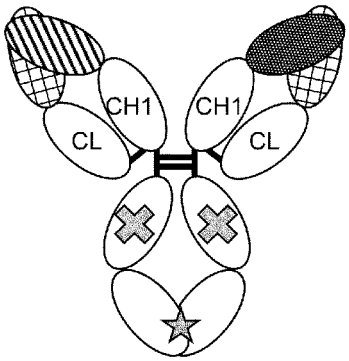
[図1]

a ERY22



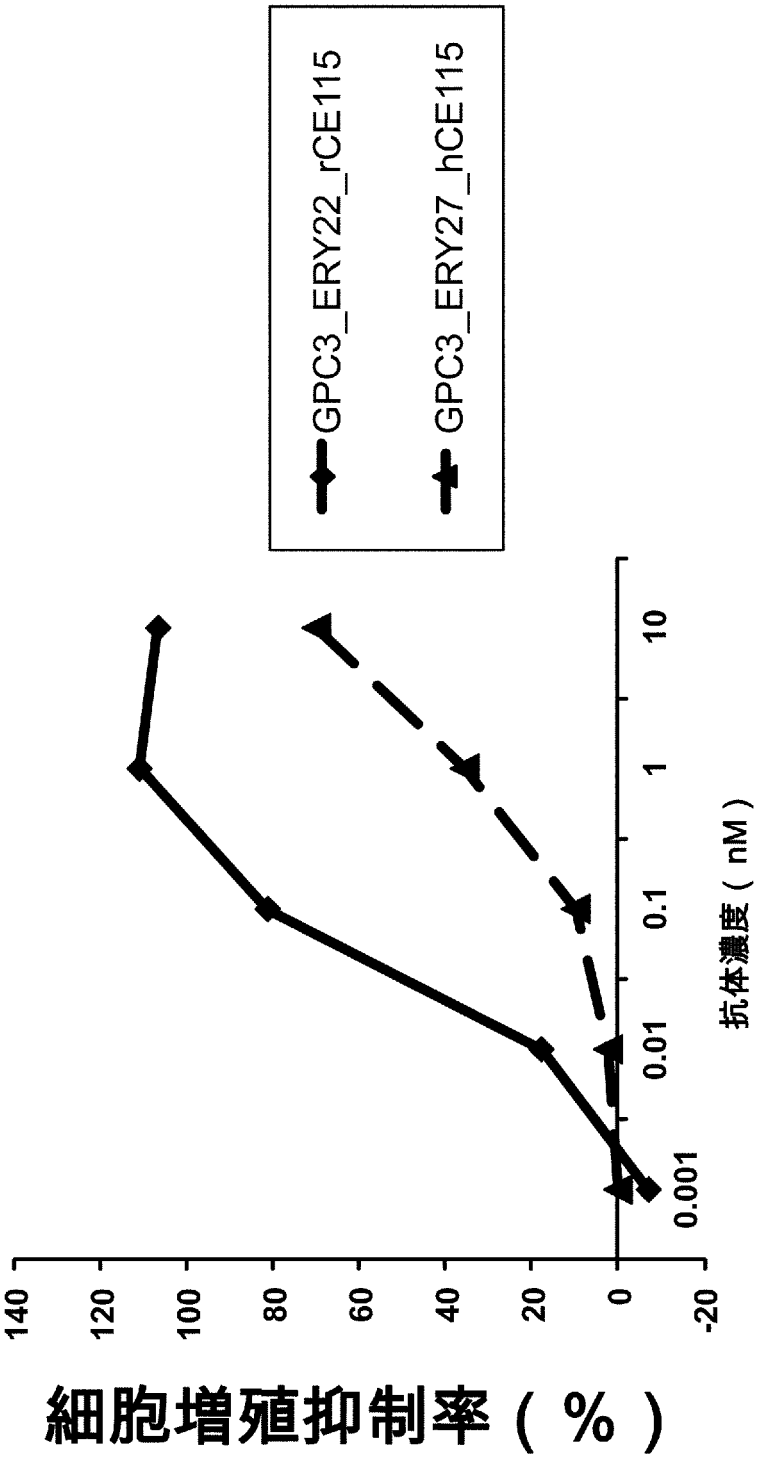

抗癌抗原(GPC3)抗体 H鎖可変領域
抗癌抗原(GPC3)抗体 L鎖可変領域
抗CD3抗体 H鎖可変領域
抗CD3抗体 L鎖可変領域
抗体定常領域
サイレントFc変異
ヘテロFc会合化変異

b ERY27

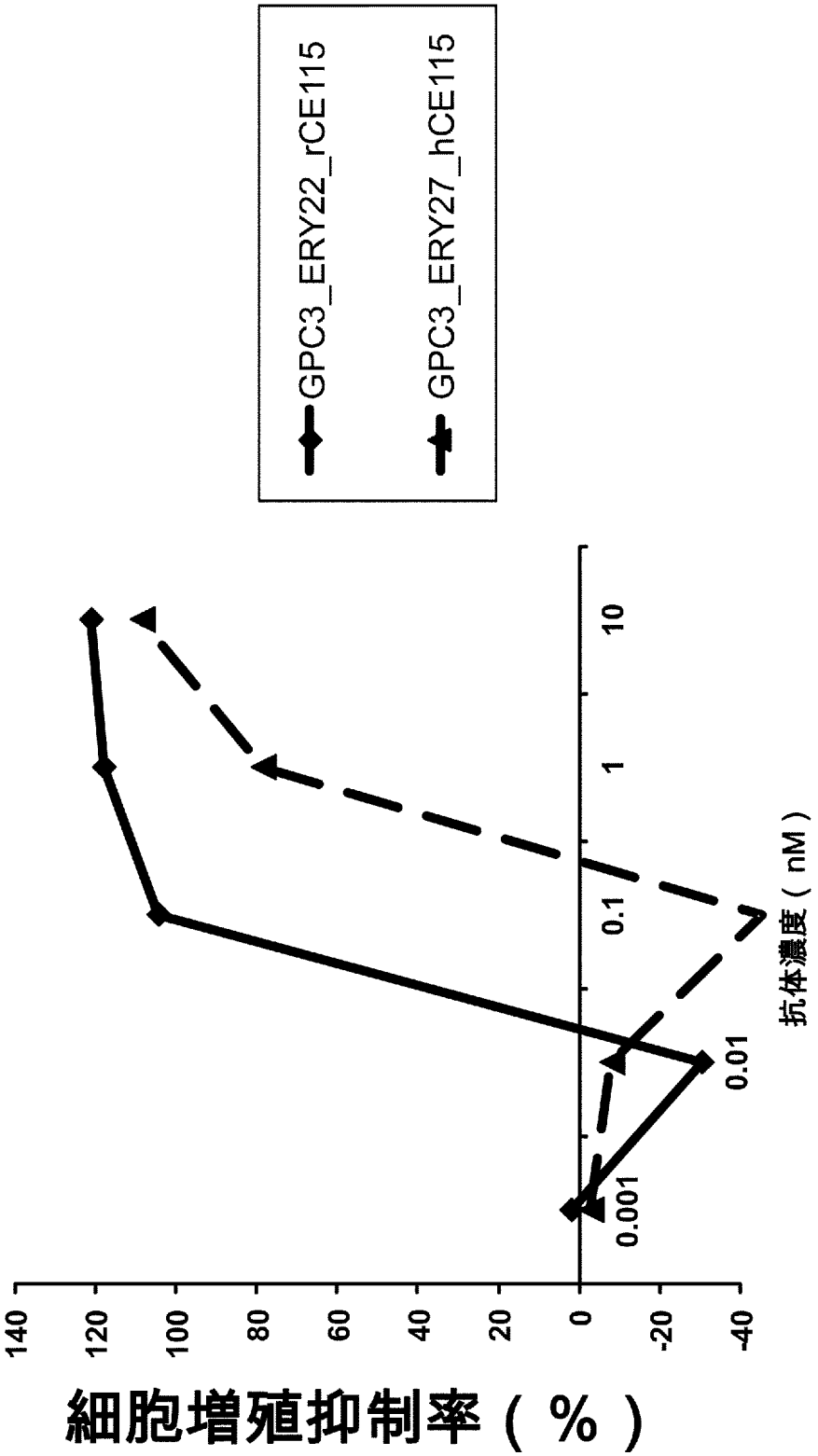



抗癌抗原(GPC3)抗体 H鎖可変領域
抗CD3抗体 H鎖可変領域
共通L鎖可変領域
抗体定常領域
サイレントFc変異
ヘテロFc会合化変異

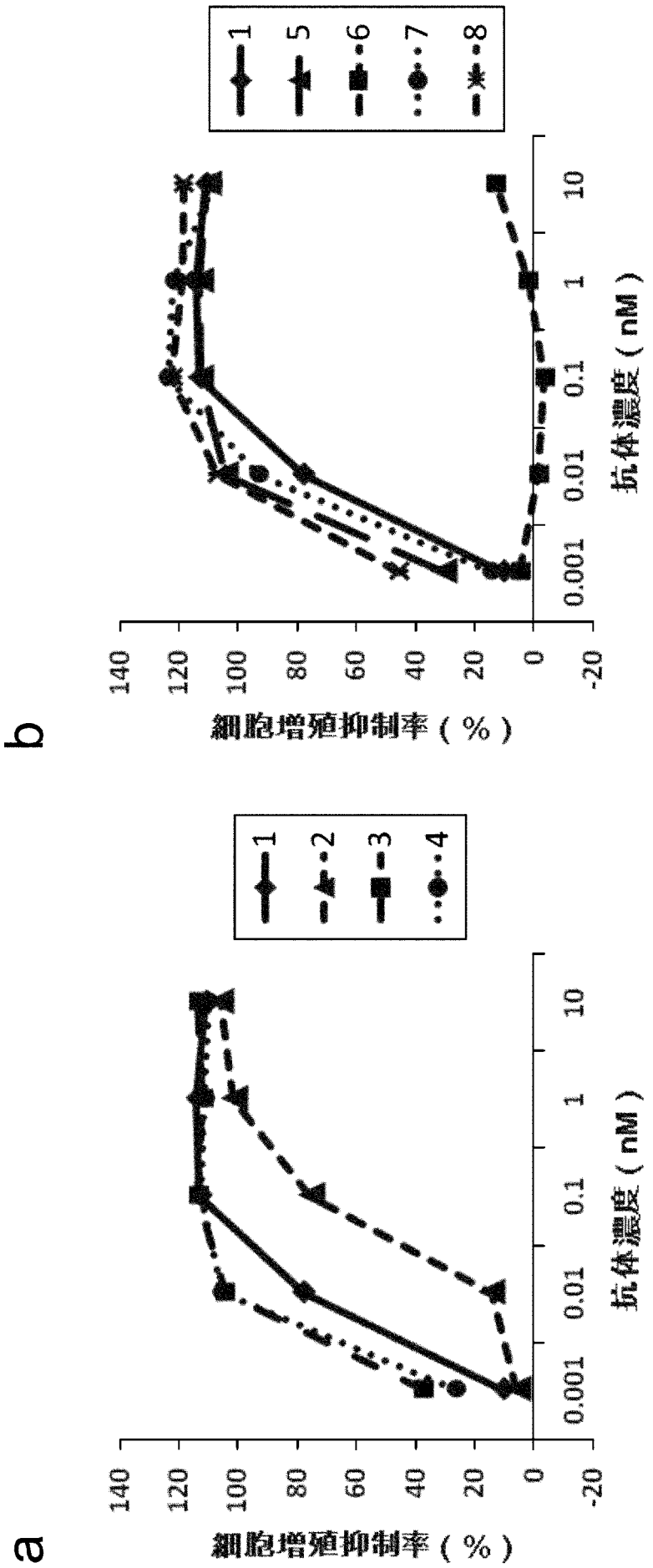
[図2]


GPC3_ERY22_rCE115
GPC3_ERY27_hCE115
140
120
100
80
60
40
20
0
-20
0.001
0.01
0.1
1
10
抗体濃度（nM）
細胞増殖抑制率（%）

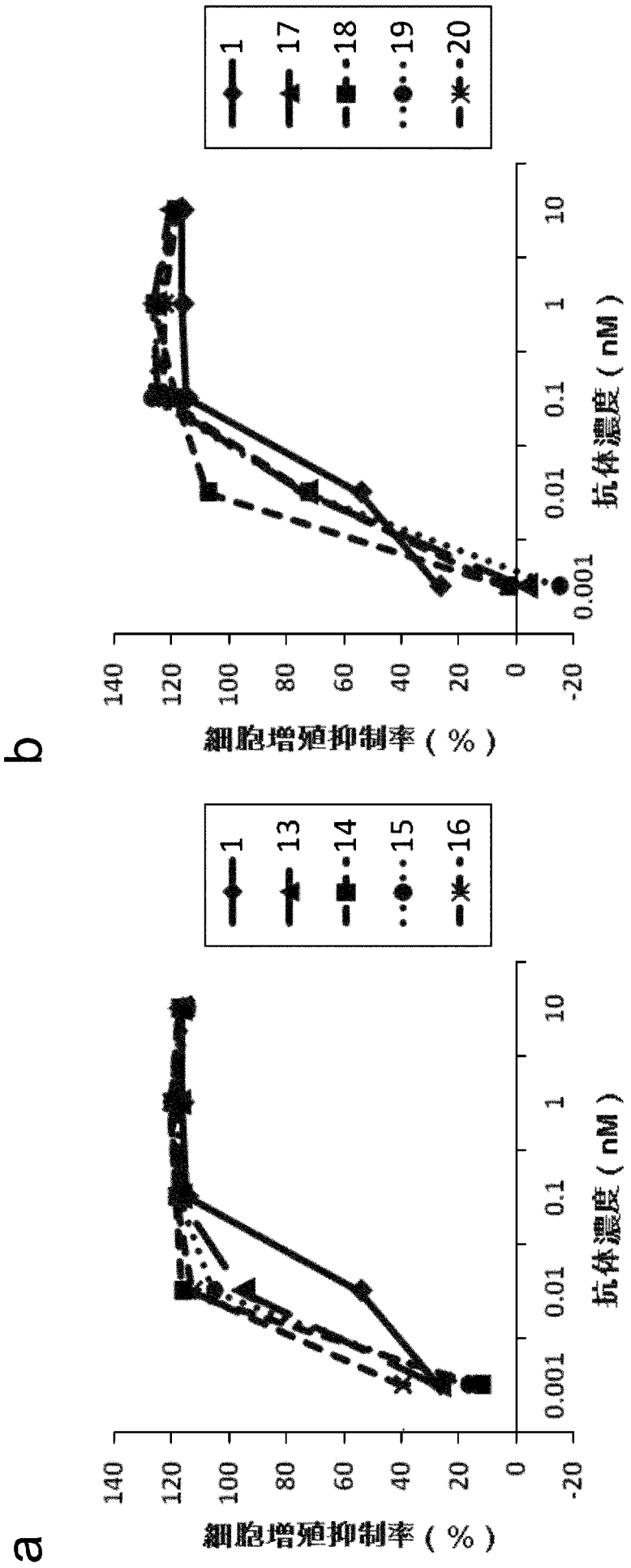
[図3]


GPC3_ERY22_rCE115
GPC3_ERY27_hCE115
140
120
100
80
60
40
20
0
-20
-40
0.001
0.01
0.1
1
10
抗体濃度（nM）
細胞増殖抑制率（%）

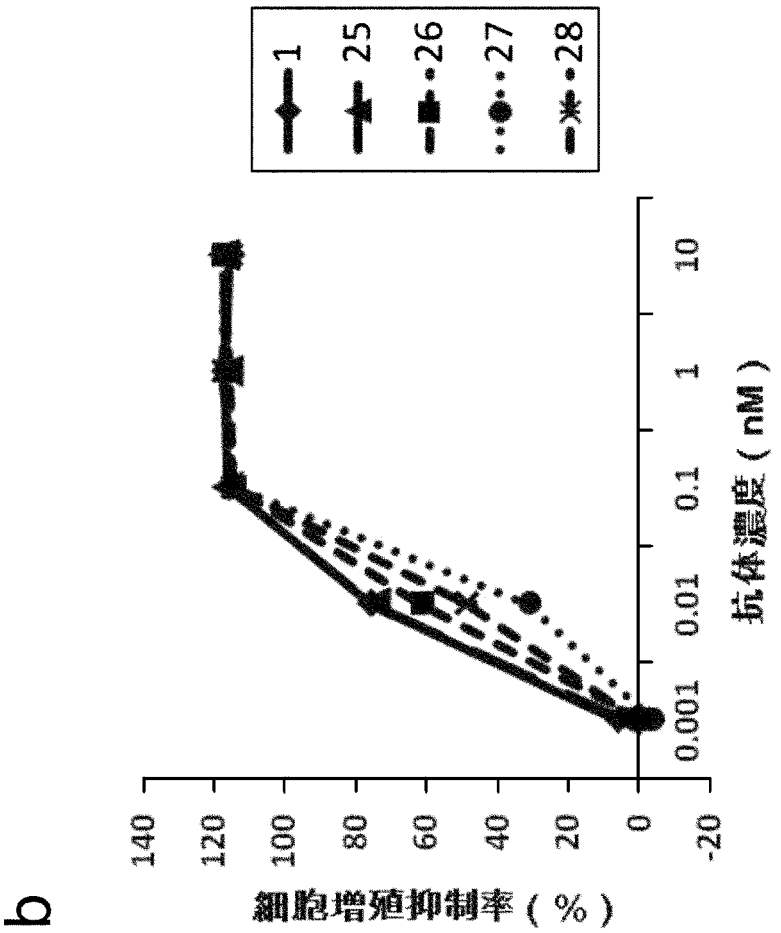
[図4]

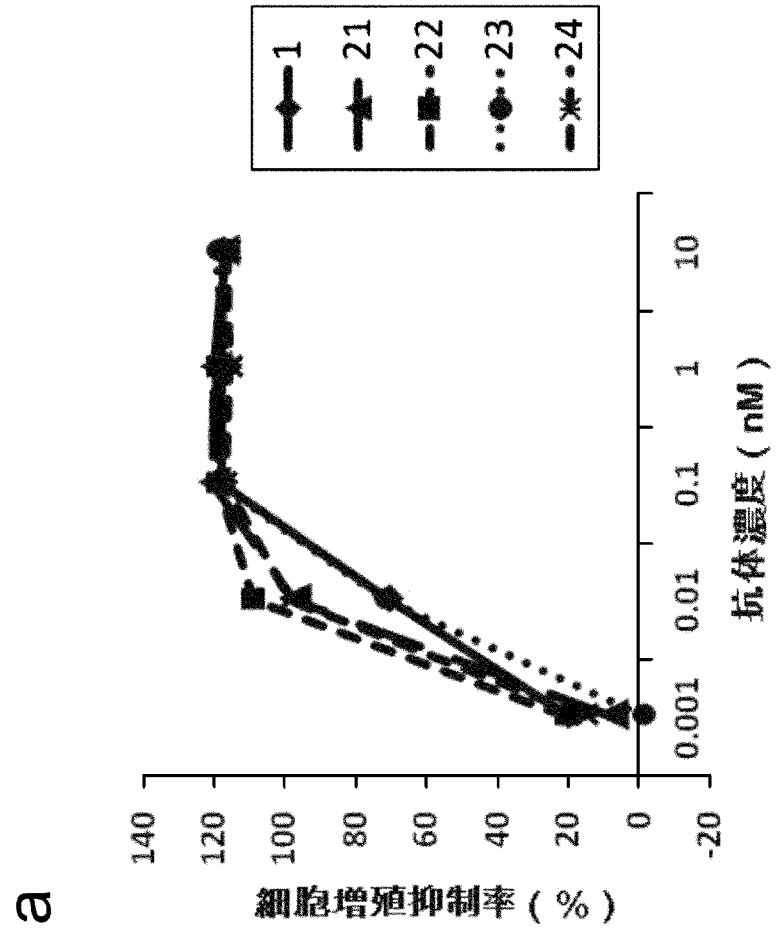

b
1
5
6
7
8
140
120
100
80
60
40
20
0
-20
細胞増殖抑制率（％）
0.001
0.01
0.1
1
10
抗体濃度（nM）
a
1
2
3
4
140
120
100
80
60
40
20
0
-20
細胞増殖抑制率（％）
0.001
0.01
0.1
1
10
抗体濃度（nM）

[図5]

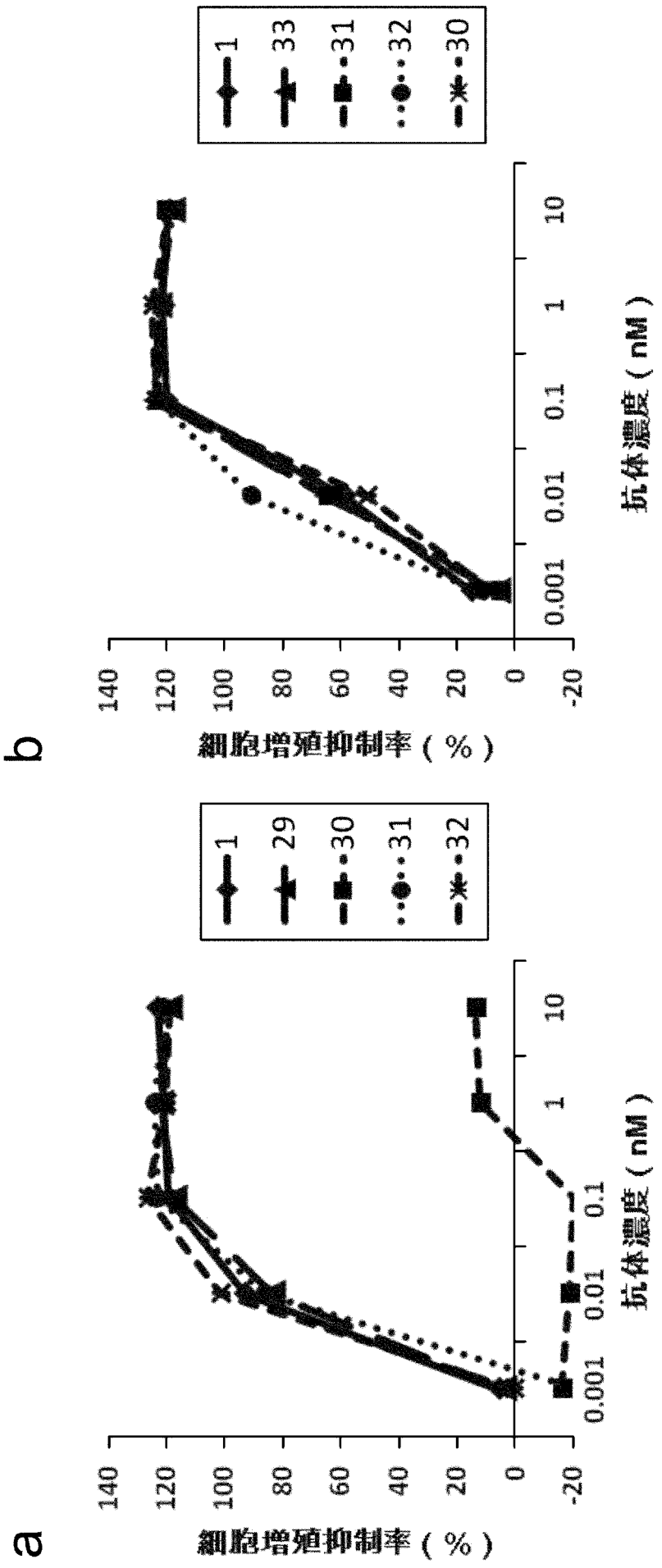

a
細胞増殖抑制率（%）
140
120
100
80
60
40
20
0
-20
0.001
0.01
0.1
1
10
抗体濃度（nM）
1
13
14
15
16
b
細胞増殖抑制率（%）
140
120
100
80
60
40
20
0
-20
0.001
0.01
0.1
1
10
抗体濃度（nM）
1
17
18
19
20

[図6]

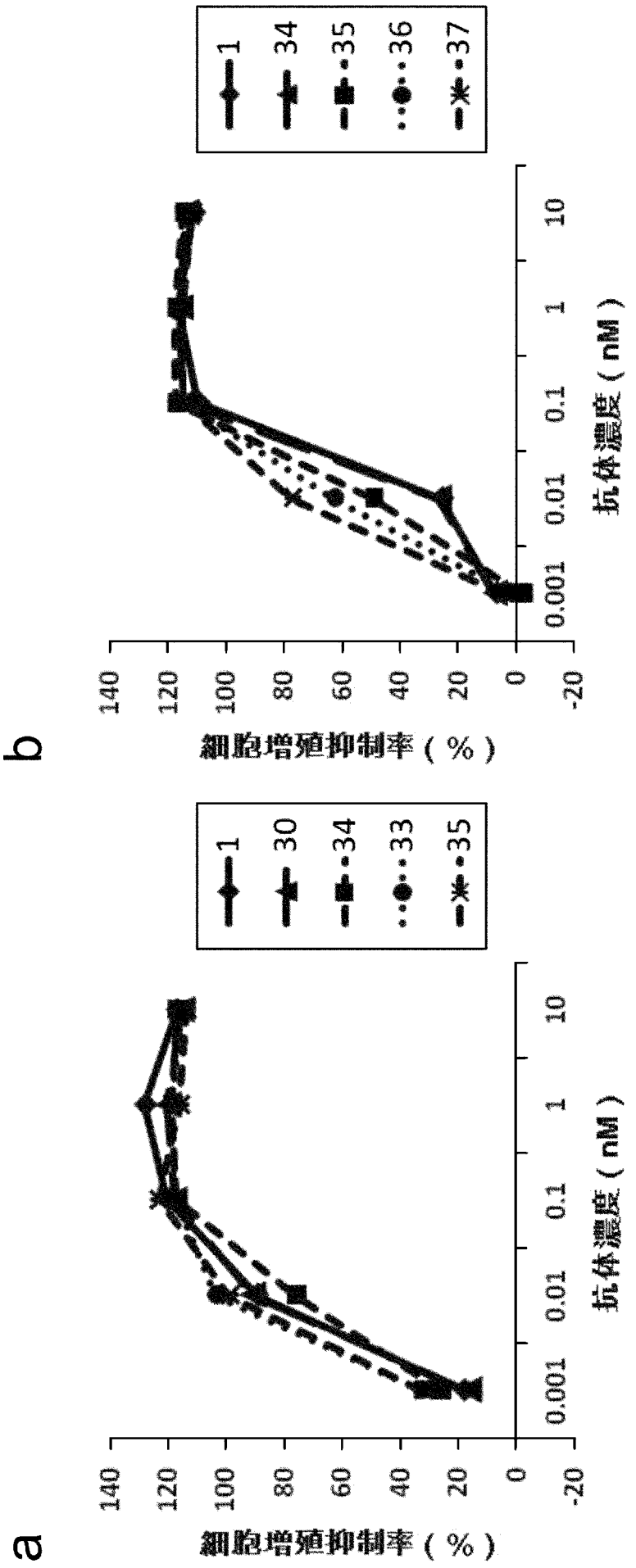

b
1
25
26
27
28
140
120
100
80
60
40
20
0
-20
細胞増殖抑制率（%）
0.001
0.01
0.1
1
10
抗体濃度（nM）


a
1
21
22
23
24
140
120
100
80
60
40
20
0
-20
細胞増殖抑制率（%）
0.001
0.01
0.1
1
10
抗体濃度（nM）

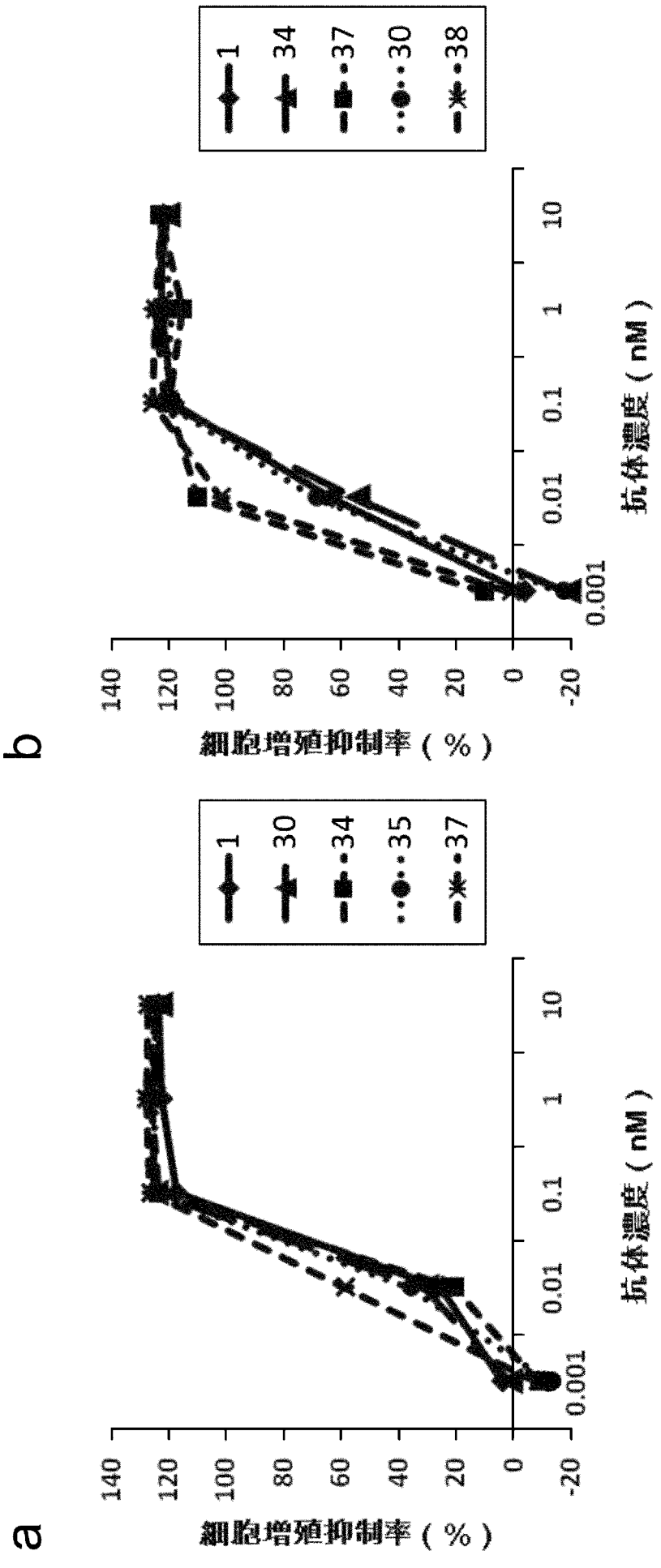
[図7]


b
1
33
31
32
30
140
120
100
80
60
40
20
0
-20
細胞増殖抑制率（%）
0.001
0.01
0.1
1
10
抗体濃度（nM）
a
1
29
30
31
32
140
120
100
80
60
40
20
0
-20
細胞増殖抑制率（%）
0.001
0.01
0.1
1
10
抗体濃度（nM）

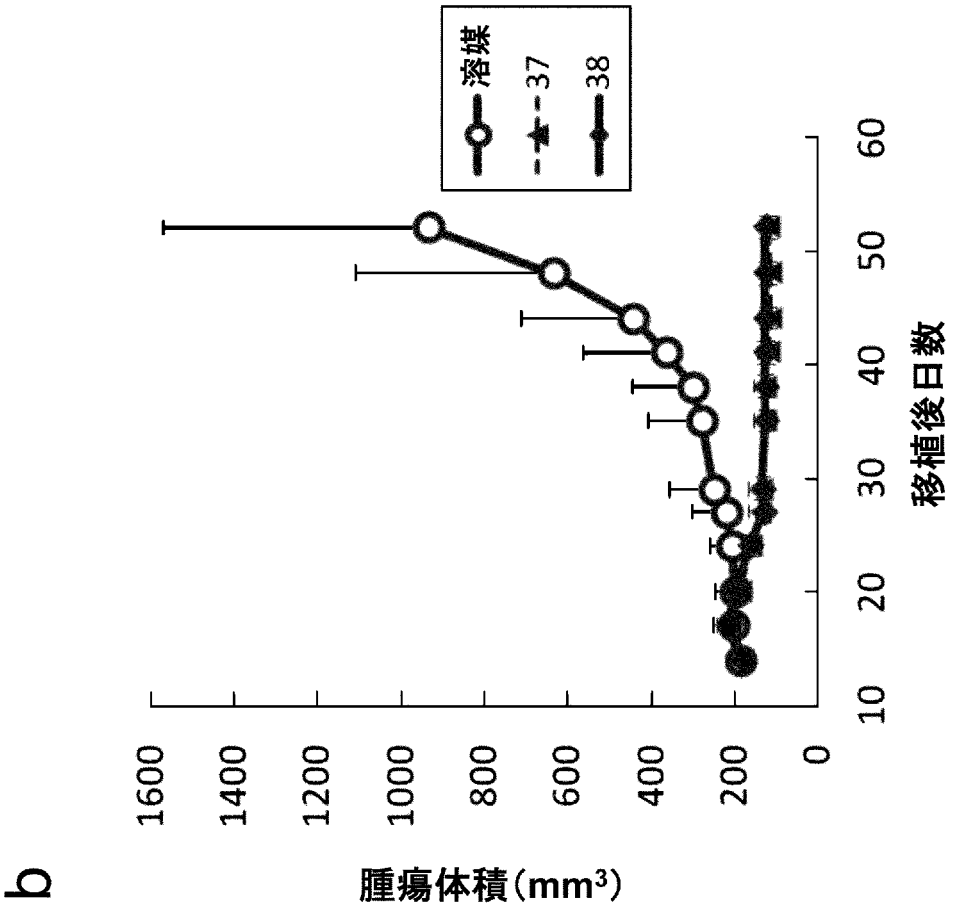
[図8]

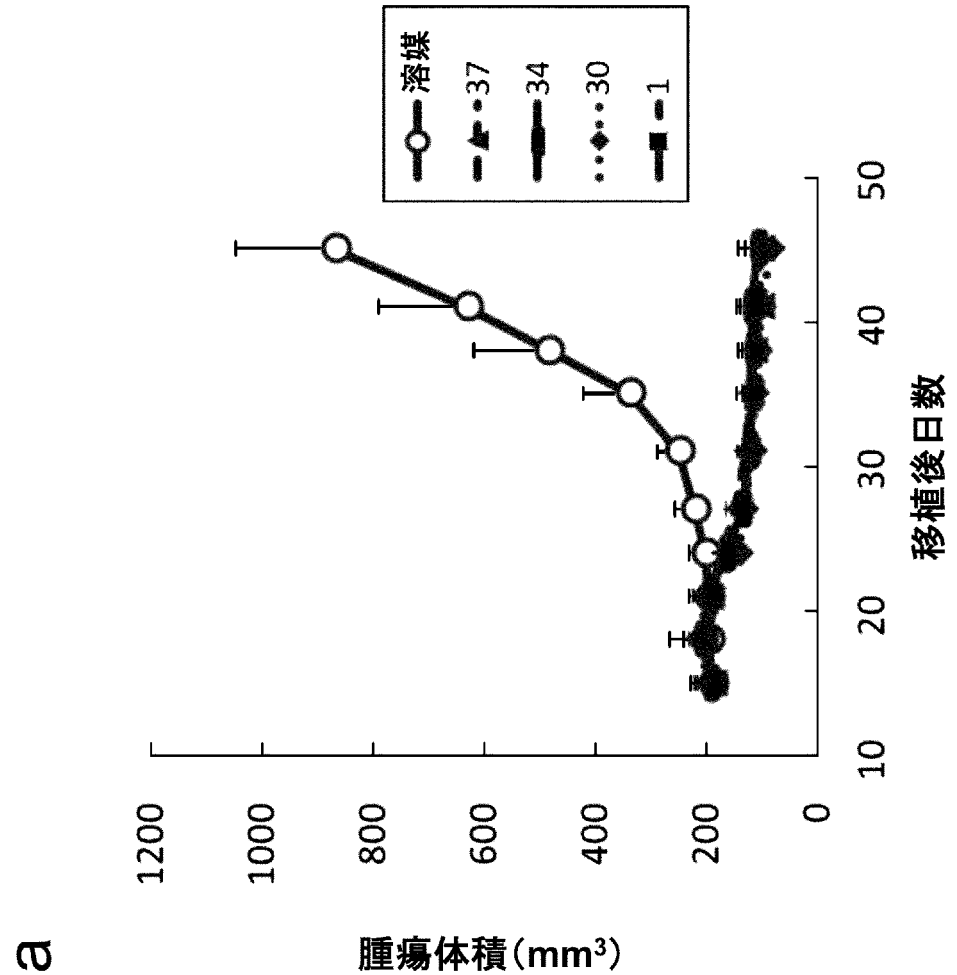

a
細胞増殖抑制率（%）
140
120
100
80
60
40
20
0
-20
0.001
0.01
0.1
1
10
抗体濃度（nM）
1
30
34
33
35
b
細胞増殖抑制率（%）
140
120
100
80
60
40
20
0
-20
0.001
0.01
0.1
1
10
抗体濃度（nM）
1
34
35
36
37

[図9]

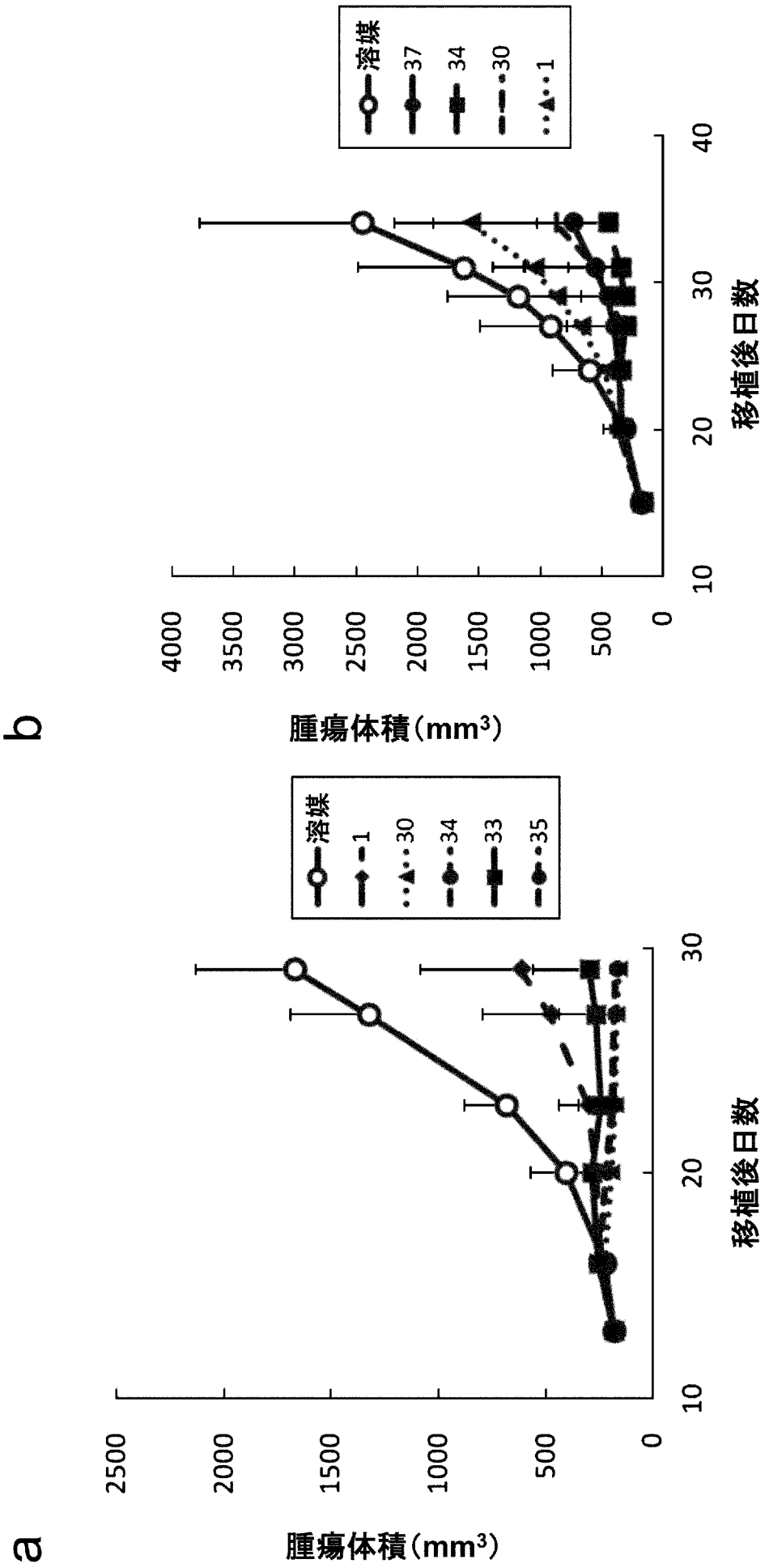

a
細胞増殖抑制率（%）
140
120
100
80
60
40
20
0
-20
0.001
0.01
0.1
1
10
抗体濃度（nM）
1
30
34
35
37
b
細胞増殖抑制率（%）
抗体濃度（nM）
1
34
37
30
38

[図10]


b
溶媒
37
38
1600
1400
1200
1000
800
600
400
200
0
腫瘍体積(mm3)
10
20
30
40
50
60
移植後日数


a
溶媒
37
34
30
1
1200
1000
800
600
400
200
0
腫瘍体積(mm3)
10
20
30
40
50
移植後日数

[図11]


b
腫瘍体積(mm³)
4000
3500
3000
2500
2000
1500
1000
500
0
10
20
30
40
移植後日数
溶媒
37
34
30
1
a
腫瘍体積(mm³)
2500
2000
1500
1000
500
0
10
20
30
移植後日数
溶媒
1
30
34
33
35

[図12]

```
Kabat    1                                                                   2
EU index 1-2---------3----------4----------5----------6----------7----------8----------9----------0----------1----------2--
         8-0---------0----------0----------0----------0----------0----------0----------0----------0----------0----------0--
IgG1     ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCD-
IgG2     ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSNFGTQTYTCNVDHKPSNTKVDKTVERK--CC
IgG3     ASTKGPSVFPLAPCSRSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYTCNVNHKPSNTKVDKRVELKTPLG
IgG4     ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTKTYTCNVDHKPSNTKVDKRVESKYG--

Kabat    2
EU index 2----------------------------------------------------------3----------4----------5----------6----------7----------8
         2---------8----------------------------------------------------0----------0----------0----------0----------0----------0
IgG1     -KTHTCPP--------------------------------------------------CPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVD
IgG2     -V-E-CPP--------------------------------------------------CPAPPVA-GPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVD
IgG3     DTTHTCPRCPEPKSCDTPPPCPRCPEPKSCDTPPPCPRCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFKWYVD
IgG4     ---PPCPS--------------------------------------------------CPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVD

Kabat    2          3
EU index 8----------9----------0----------1----------2----------3----------4----------5----------6----------7----------8-----
         1----------0----------0----------0----------0----------0----------0----------0----------0----------0----------0-----
IgG1     GVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNG
IgG2     GVEVHNAKTKPREEQFNSTFRVVSVLTVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNG
IgG3     GVEVHNAKTKPREEQYNSTFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSG
IgG4     GVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNG

Kabat    3          4
EU index 8---9----------0----------1----------2----------3----------4
         6---0----------0----------0----------0----------0----------0------7
IgG1     QPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK (配列番号:23)
IgG2     QPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK (配列番号:24)
IgG3     QPENNYNTTPPMLDSDGSFFLYSKLTVDKSRWQQGNIFSCSVMHEALHNRFTQKSLSLSPGK (配列番号:25)
IgG4     QPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK (配列番号:26)
```

[図13-1]

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Kabat CDR H1 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | Chothia CDR H1 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Contact CDR H1 | | | | | | | | | | | | | |
| 抗体名 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 35a | 35b | 36 | 37 | 38 | 39 | 40 |
| CE115HA000 | Q | V | Q | L | V | E | S | G | G | G | V | V | Q | P | G | R | S | L | R | L | S | C | A | A | S | G | F | T | F | S | N | A | W | M | H | - | - | W | V | R | Q | A |
| TR01H040 | Q | V | Q | L | V | E | S | G | G | G | L | V | Q | P | G | R | S | L | R | L | S | C | A | A | S | G | F | T | F | S | N | A | W | M | H | - | - | W | V | R | Q | A |
| TR01H071 | Q | V | Q | L | V | E | S | G | G | G | L | V | Q | P | G | R | S | L | R | L | S | C | A | A | S | G | F | T | F | S | N | A | W | M | H | - | - | W | V | R | Q | A |
| TR01H082 | Q | V | Q | L | V | E | S | G | G | G | L | V | Q | P | G | R | S | L | R | L | S | C | A | A | S | G | F | T | F | S | N | A | W | M | H | - | - | W | V | R | Q | A |
| TR01H084 | Q | V | Q | L | V | E | S | G | G | G | V | V | Q | P | G | G | S | L | R | L | S | C | A | A | S | G | F | T | F | S | N | A | W | M | H | - | - | W | V | R | Q | A |
| TR01H109 | Q | V | Q | L | V | E | S | G | G | G | L | V | Q | P | G | R | S | L | R | L | S | C | A | A | S | G | F | T | F | S | N | A | W | M | H | - | - | W | V | R | Q | A |
| TR01H113 | Q | V | Q | L | V | E | S | G | G | G | V | V | Q | P | G | G | S | L | R | L | S | C | A | A | S | G | F | T | F | S | N | A | W | M | H | - | - | W | V | R | Q | A |
| H0000 | Q | V | Q | L | V | Q | S | G | A | E | V | K | K | P | G | A | S | V | K | V | S | C | K | A | S | G | Y | T | F | T | D | Y | E | M | H | - | - | W | I | R | Q | P |
| H0610 | Q | V | Q | L | V | Q | S | G | A | E | V | K | K | P | G | A | S | V | K | V | S | C | K | A | S | G | Y | T | F | T | D | Y | E | M | H | - | - | W | I | R | Q | P |
| GCH054 | Q | V | Q | L | V | Q | S | G | A | E | V | K | K | P | G | A | S | V | T | V | S | C | K | A | S | G | Y | T | F | T | D | Y | E | M | H | - | - | W | I | R | Q | P |
| GCH065 | Q | V | Q | L | V | Q | S | G | A | E | V | K | K | P | G | A | S | V | T | V | S | C | K | A | S | G | Y | T | F | T | D | Y | E | M | H | - | - | W | I | R | Q | P |
| GCH094 | Q | V | Q | L | V | Q | S | G | A | E | V | K | K | P | G | A | S | V | T | V | S | C | K | A | S | G | Y | T | F | T | D | Y | E | M | H | - | - | W | V | R | Q | A |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 抗体名 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 52a | 52b | 52c | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 |
| CE115HA000 | P | G | K | G | L | E | W | V | A | Q | I | K | A | K | S | N | N | Y | A | T | Y | Y | A | E | S | V | K | G | R | F | T | I | S | R | D | D | S | K | N | S | L | Y |
| TR01H040 | P | G | K | G | L | E | W | V | A | Q | I | K | D | K | S | Q | N | Y | A | T | Y | Y | A | E | S | V | K | G | R | F | T | I | S | R | A | D | S | K | N | S | I | Y |
| TR01H071 | P | G | K | G | L | E | W | V | A | Q | I | K | D | K | S | N | N | Y | A | T | Y | Y | A | E | S | V | K | G | R | F | T | I | S | R | A | D | S | K | N | S | I | Y |
| TR01H082 | P | G | K | G | L | E | W | V | A | Q | I | K | D | K | S | Q | N | Y | A | T | Y | Y | A | E | S | V | K | G | R | F | T | I | S | R | D | D | S | K | N | S | L | Y |
| TR01H084 | P | G | K | G | L | E | W | V | A | Q | I | K | D | K | S | Q | N | Y | A | T | Y | Y | A | E | S | V | K | G | R | F | T | I | S | R | A | D | S | K | N | S | I | Y |
| TR01H109 | P | G | K | G | L | E | W | V | A | Q | I | K | D | K | S | Q | N | Y | A | T | Y | V | A | E | S | V | K | G | R | F | T | I | S | R | D | D | S | K | N | S | L | Y |
| TR01H113 | P | G | K | G | L | E | W | V | A | Q | I | K | D | K | S | Q | N | Y | A | T | Y | V | A | E | S | V | K | G | R | F | T | I | S | R | A | D | S | K | N | S | I | Y |
| H0000 | P | G | Q | G | L | E | W | I | G | A | I | D | P | - | - | K | T | G | D | T | A | Y | S | Q | K | F | K | G | R | V | T | L | T | A | D | K | S | T | S | T | A | Y |
| H0610 | P | G | Q | G | L | E | W | I | G | A | I | D | G | - | - | K | T | P | D | T | A | Y | S | Q | K | F | K | G | R | V | T | L | T | A | D | K | S | T | S | T | A | Y |
| GCH054 | P | G | E | G | L | E | W | I | G | A | I | D | G | - | - | E | T | P | D | T | A | Y | S | E | K | F | K | G | R | V | T | L | T | A | D | K | S | T | S | T | A | Y |
| GCH065 | P | G | E | G | L | E | W | I | G | A | I | D | G | - | - | P | T | P | D | T | A | Y | S | E | K | F | K | G | R | V | T | L | T | A | D | K | S | T | S | T | A | Y |
| GCH094 | P | G | E | G | L | E | W | M | G | A | I | D | G | - | - | E | T | P | D | T | A | Y | S | E | K | F | K | G | R | V | T | L | T | A | D | K | S | T | S | T | A | Y |

[図13-2]

Kabat CDR H3
Chothia CDR H3
Contact CDR H3

| 抗体名 | 80 | 81 | 82 | 82a | 82b | 82c | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 100a | 100b | 100c | 100d | 100e | 100f | 100g | 100h | 100i | 100j | 100k | 101 | 102 | 103 | 104 | 105 | 106 | 107 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CE115HA000 | L | Q | M | N | S | L | K | T | E | D | T | A | V | Y | Y | C | R | Y | V | H | Y | G | A | Y | Y | G | V | - | - | - | - | - | - | - | - | D | A | W | G | Q | G | T |
| TR01H040 | L | Q | M | N | S | L | K | T | E | D | T | A | V | Y | Y | C | R | Y | V | H | Y | S | A | S | Y | G | V | - | - | - | - | - | - | - | - | D | A | W | G | Q | G | T |
| TR01H071 | L | Q | M | N | S | L | K | T | E | D | T | A | V | Y | Y | C | R | Y | V | H | Y | A | A | S | Y | G | V | - | - | - | - | - | - | - | - | D | I | W | G | Q | G | T |
| TR01H082 | L | Q | M | N | S | L | K | T | E | D | T | A | V | Y | Y | C | R | Y | V | H | Y | A | A | G | Y | G | V | - | - | - | - | - | - | - | - | D | A | W | G | Q | G | T |
| TR01H084 | L | Q | M | N | S | L | K | T | E | D | T | A | V | Y | Y | C | R | Y | V | H | Y | A | A | G | Y | G | V | - | - | - | - | - | - | - | - | D | I | W | G | Q | G | T |
| TR01H109 | L | Q | M | N | S | L | K | T | E | D | T | A | V | Y | Y | C | R | Y | V | H | Y | A | A | G | Y | G | V | - | - | - | - | - | - | - | - | D | A | W | G | Q | G | T |
| TR01H113 | L | Q | M | N | S | L | K | T | E | D | T | A | V | Y | Y | C | R | Y | V | H | Y | A | A | G | Y | G | V | - | - | - | - | - | - | - | - | D | I | W | G | Q | G | T |
| H0000 | M | E | L | S | S | L | T | S | E | D | T | A | V | Y | Y | C | T | R | F | Y | S | Y | - | - | - | - | - | - | - | - | - | - | - | - | - | T | Y | W | G | Q | G | T |
| H0610 | M | E | L | S | S | L | T | S | E | D | T | A | V | Y | Y | C | T | R | F | Y | S | Y | - | - | - | - | - | - | - | - | - | - | - | - | - | T | Y | W | G | Q | G | T |
| GCH054 | M | E | L | S | S | L | T | S | E | D | T | A | V | Y | Y | C | T | R | F | Y | S | Y | - | - | - | - | - | - | - | - | - | - | - | - | - | T | Y | W | G | Q | G | T |
| GCH065 | M | E | L | S | S | L | T | S | E | D | T | A | V | Y | Y | C | T | R | F | Y | S | Y | - | - | - | - | - | - | - | - | - | - | - | - | - | T | Y | W | G | Q | G | T |
| GCH094 | M | E | L | S | S | L | T | S | E | D | T | A | V | Y | Y | C | T | R | F | Y | S | Y | - | - | - | - | - | - | - | - | - | - | - | - | - | T | Y | W | G | Q | G | T |

| 抗体名 | 108 | 109 | 110 | 111 | 112 | 113 |
|---|---|---|---|---|---|---|
| CE115HA000 | T | V | T | V | S | S |
| TR01H040 | T | V | T | V | S | S |
| TR01H071 | T | V | T | V | S | S |
| TR01H082 | T | V | T | V | S | S |
| TR01H084 | T | V | T | V | S | S |
| TR01H109 | T | V | T | V | S | S |
| TR01H113 | T | V | T | V | S | S |
| H0000 | L | V | T | V | S | S |
| H0610 | L | V | T | V | S | S |
| GCH054 | L | V | T | V | S | S |
| GCH065 | L | V | T | V | S | S |
| GCH094 | L | V | T | V | S | S |

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| | | | | | | | | | | | | | | | | | | | | | | | | Kabat CDR L1 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | Chothia CDR L1 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Contact CDR L1 | | | | | | |
| 抗体名 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 27a | 27b | 27c | 27d | 27e | 27f | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |
| L0000 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | S | L | V | H | S | - | N | R | N | T | Y | L | H | W | Y |
| L0011 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | P | L | V | H | S | - | N | R | N | T | Y | L | H | W | Y |
| L0201 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | P | P | V | H | S | - | N | R | N | T | Y | L | H | W | Y |
| L0203 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | S | P | V | H | S | - | N | R | N | T | Y | I | H | W | Y |
| L0204 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | S | P | V | H | S | - | N | R | N | T | Y | L | H | W | Y |
| L0206 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | S | P | V | H | S | - | N | R | N | T | Y | L | H | W | Y |
| L0208 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | S | P | V | H | S | - | N | R | N | T | Y | L | H | W | Y |
| L0209 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | S | P | V | H | S | - | N | R | N | T | Y | I | H | W | Y |
| L0211 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | P | P | V | H | S | - | N | R | N | T | Y | L | H | W | Y |
| L0212 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | P | S | Q | S | P | V | H | S | - | N | R | N | T | Y | L | H | W | Y |
| L0222 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | S | P | V | H | S | - | N | R | N | T | Y | I | Q | W | Y |
| L0272 | D | I | V | M | T | Q | S | P | L | S | L | P | V | T | P | G | E | P | A | S | I | S | C | R | S | S | Q | P | L | V | H | S | - | N | R | Q | T | Y | L | H | W | Y |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | Kabat CDR L2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | Chothia CDR L2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | Contact CDR L2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 抗体名 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 |
| L0000 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0011 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0201 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0203 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0204 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | R | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0206 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0208 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | W | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0209 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0211 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0212 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0222 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |
| L0272 | Q | Q | K | P | G | Q | A | P | R | L | L | I | Y | K | V | S | N | R | F | S | G | V | P | D | R | F | S | G | S | G | S | G | T | D | F | T | L | K | I | S | R | V |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Kabat CDR L3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | Chothia CDR L3 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | Contact CDR L3 | | | | | | | | | | | | | | | | | | | | | | | | |
| 抗体名 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 95a | 95b | 95c | 95d | 95e | 95f | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 |
| L0000 | E | A | E | D | V | G | V | Y | Y | C | G | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0011 | E | A | E | D | V | G | V | Y | Y | C | G | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0201 | E | A | E | D | V | G | V | Y | Y | C | G | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0203 | E | A | E | D | V | G | V | Y | Y | C | G | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0204 | E | A | E | D | V | G | V | Y | Y | C | G | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0206 | E | A | E | D | V | G | V | Y | Y | C | Y | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0208 | E | A | E | D | V | G | V | Y | Y | C | Y | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0209 | E | A | E | D | V | G | V | Y | Y | C | Y | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0211 | E | A | E | D | V | G | V | Y | Y | C | Y | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0212 | E | A | E | D | V | G | V | Y | Y | C | Y | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0222 | E | A | E | D | V | G | V | Y | Y | C | Y | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |
| L0272 | E | A | E | D | V | G | V | Y | Y | C | G | Q | G | T | Q | V | P | - | - | - | - | - | - | Y | T | F | G | Q | G | T | K | L | E | I | K |