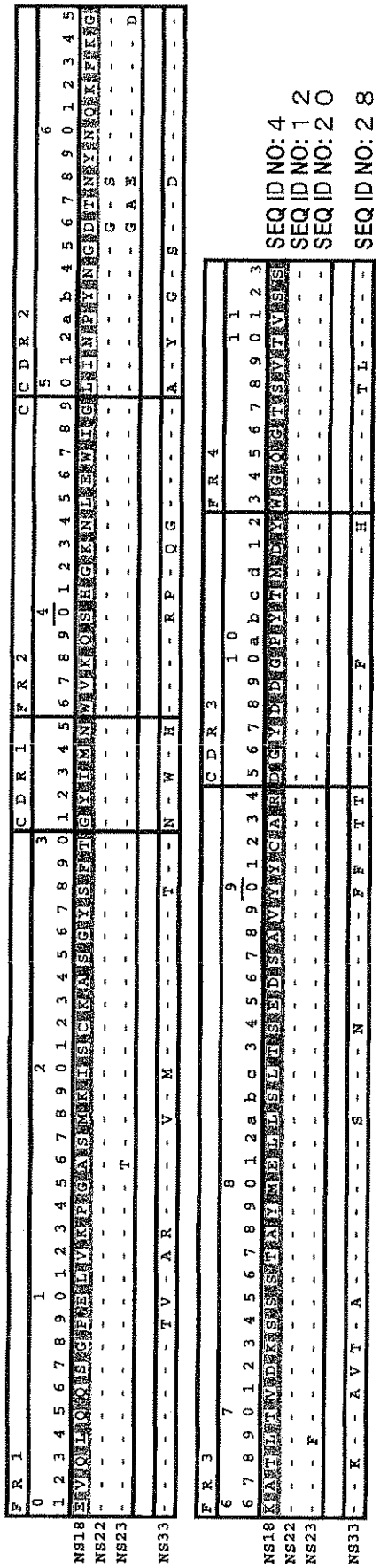


FIG. 1

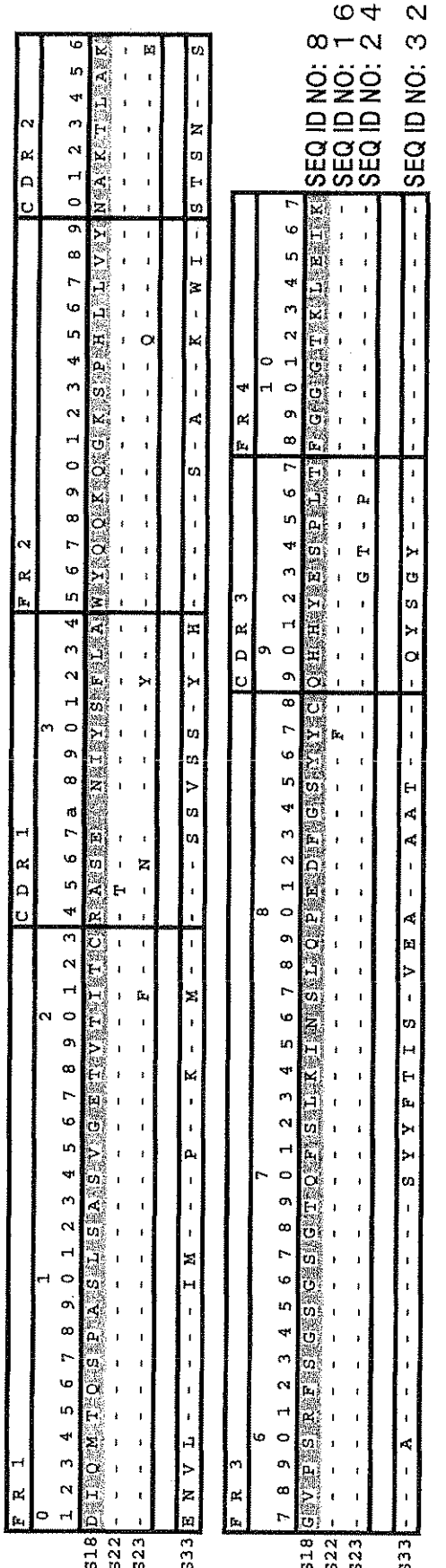

FR 1
CDR 1
FR 2
CDR 2
FR 3
CDR 3
FR 4
NS18
NS22
NS23
NS33
SEQ ID NO: 8
SEQ ID NO: 16
SEQ ID NO: 24
SEQ ID NO: 32

FIG. 2

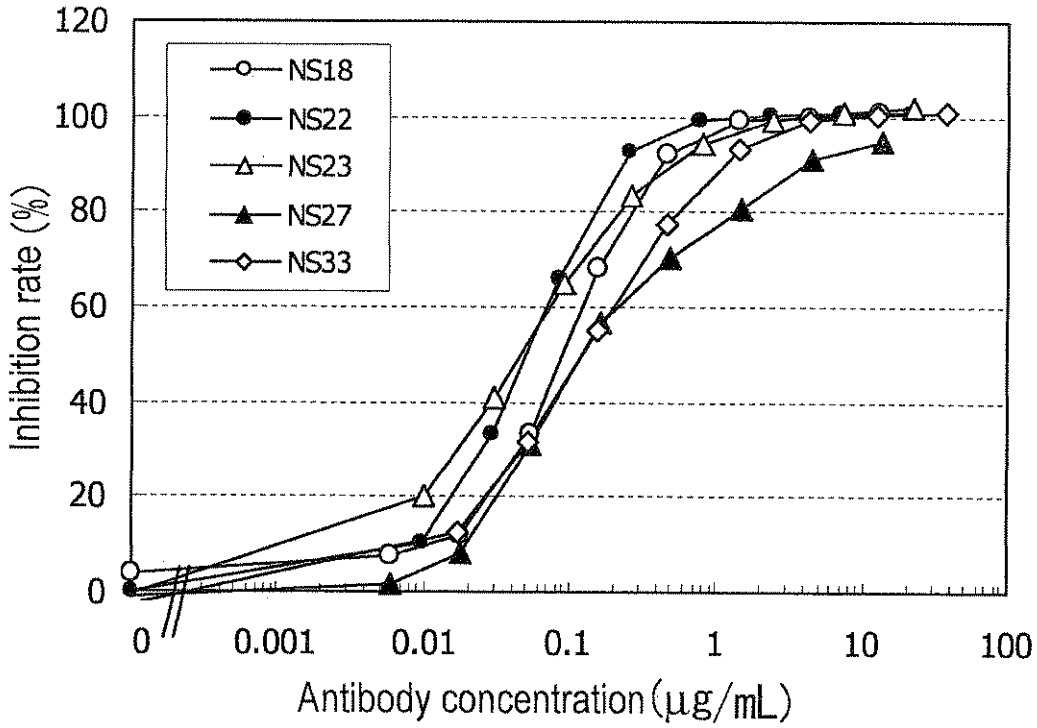

120
100
80
60
40
20
0
Inhibition rate (%)
NS18
NS22
NS23
NS27
NS33
0
0.001
0.01
0.1
1
10
100
Antibody concentration (μg/mL)

FIG. 3

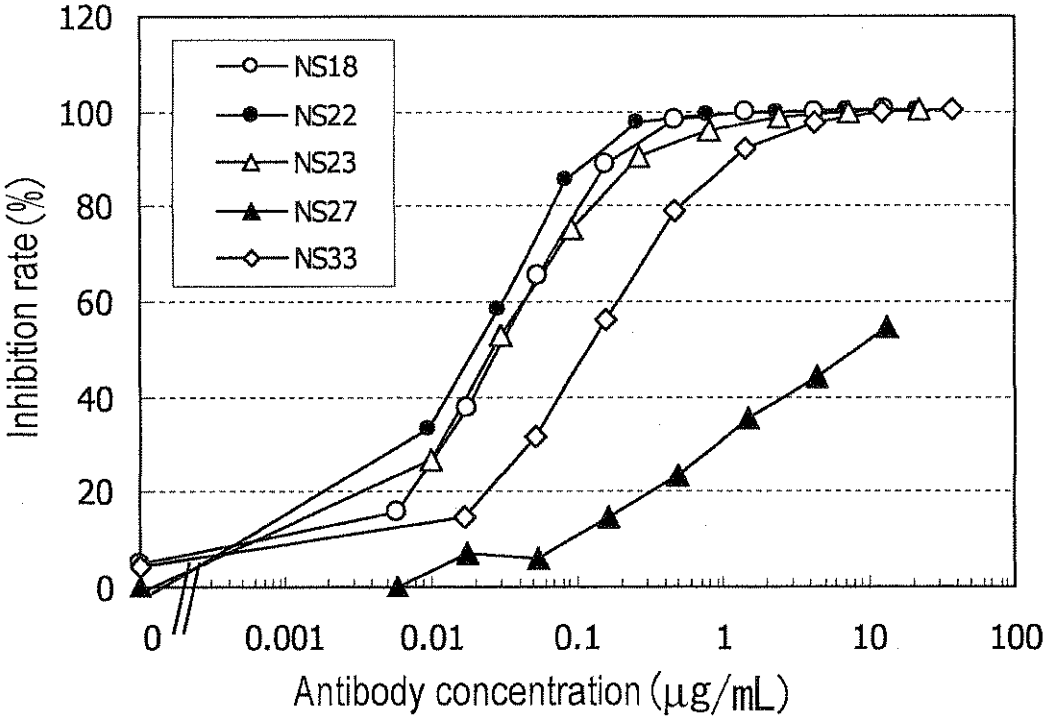

120
100
80
60
40
20
0
Inhibition rate (%)
NS18
NS22
NS23
NS27
NS33
0
0.001
0.01
0.1
1
10
100
Antibody concentration (μg/mL)

FIG. 4

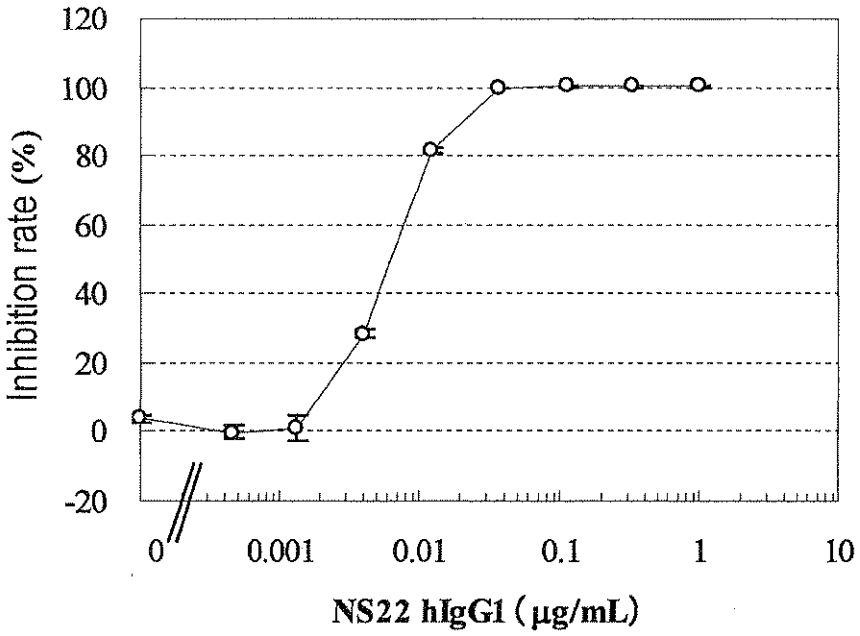

120
100
80
60
40
20
0
-20
Inhibition rate (%)
0
0.001
0.01
0.1
1
10
NS22 hIgG1 (μg/mL)

FIG. 5

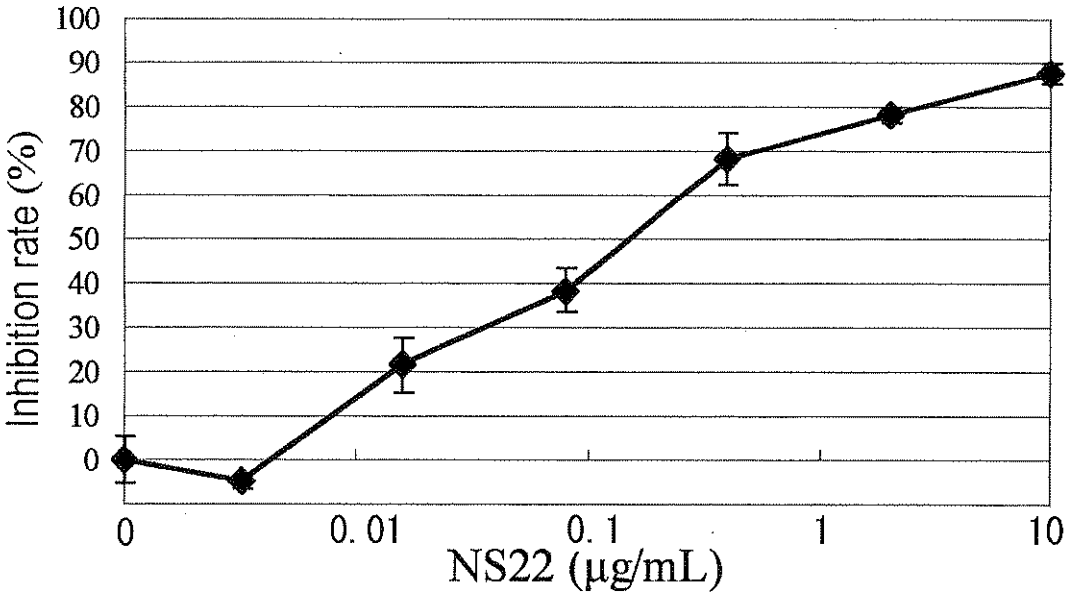

100
90
80
70
60
50
40
30
20
10
0
Inhibition rate (%)
0
0. 01
0. 1
1
10
NS22 (μg/mL)

FIG. 6

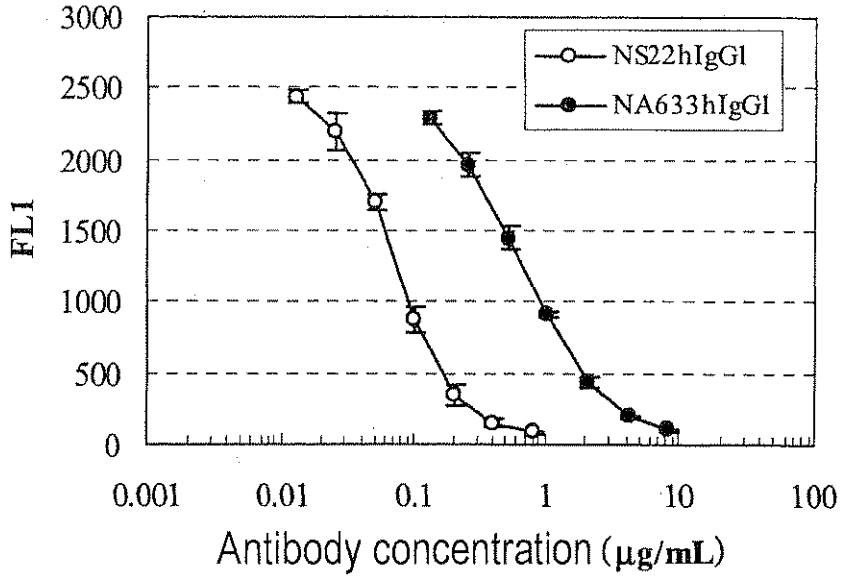

3000
2500
2000
1500
1000
500
0
FL1
NS22hIgGl
NA633hIgGl
0.001
0.01
0.1
1
10
100
Antibody concentration (μg/mL)

FIG. 7

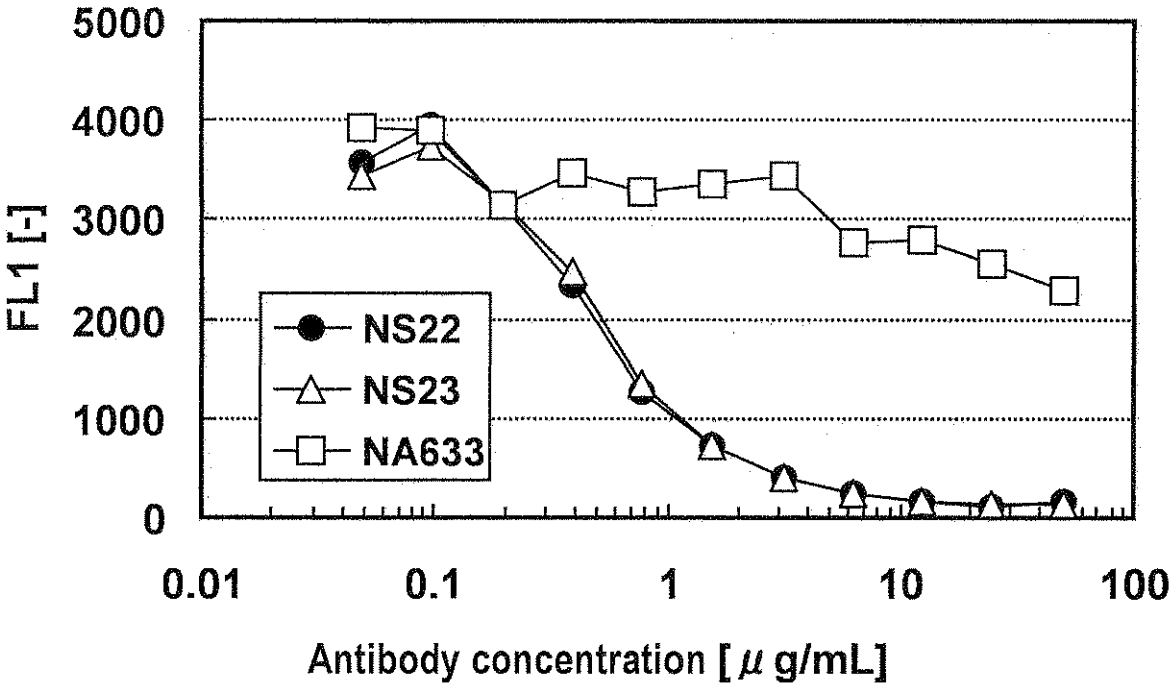
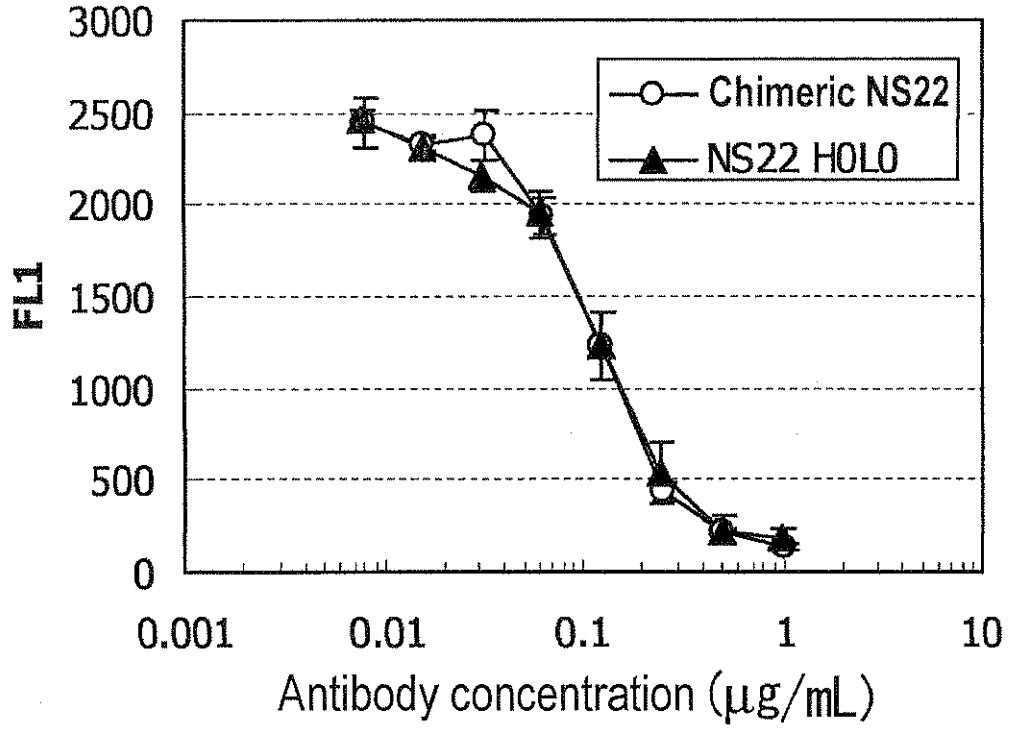

5000
4000
3000
2000
1000
0
FL1 [-]
NS22
NS23
NA633
0.01
0.1
1
10
100
Antibody concentration [μg/mL]

FIG. 8


3000
2500
2000
1500
1000
500
0
FL1
Chimeric NS22
NS22 HOLO
0.001
0.01
0.1
1
10
Antibody concentration (μg/mL)

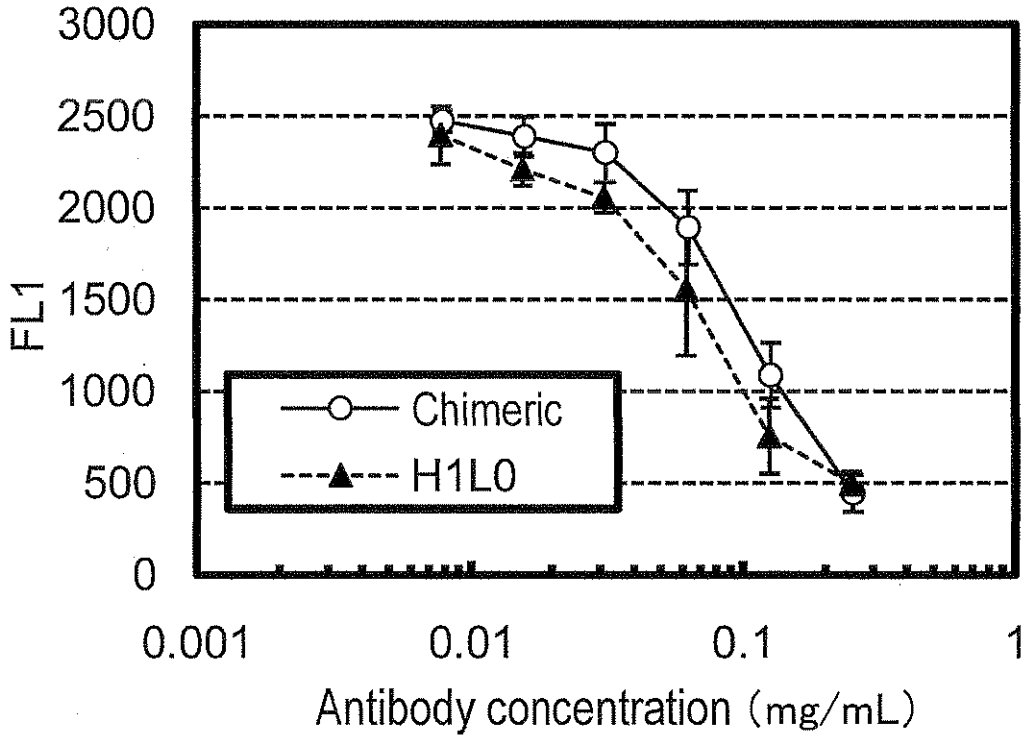

3000
2500
2000
1500
1000
500
0
FL1
Chimeric
H1L0
0.001
0.01
0.1
1
Antibody concentration (mg/mL)

FIG. 9

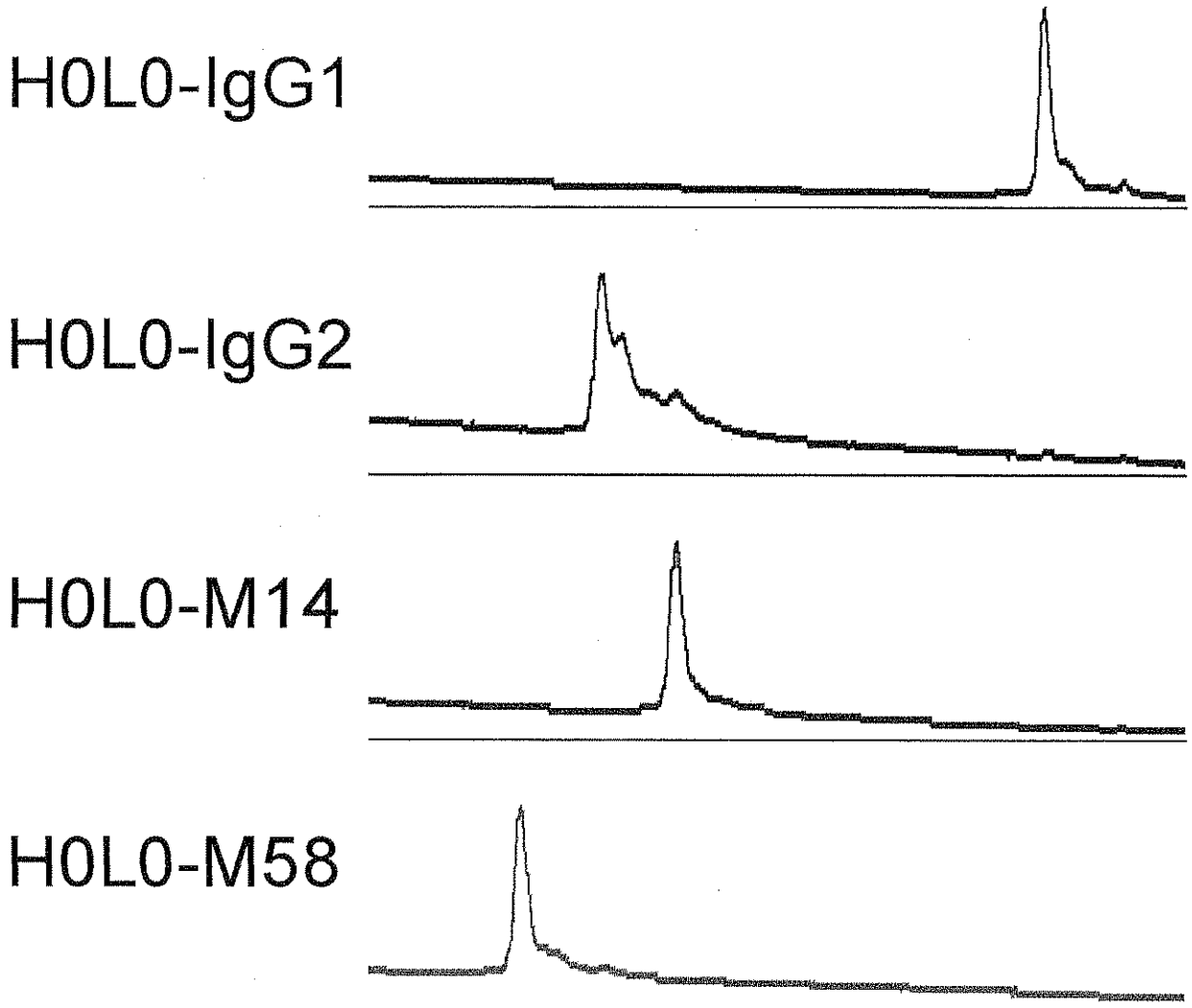


FIG. 10

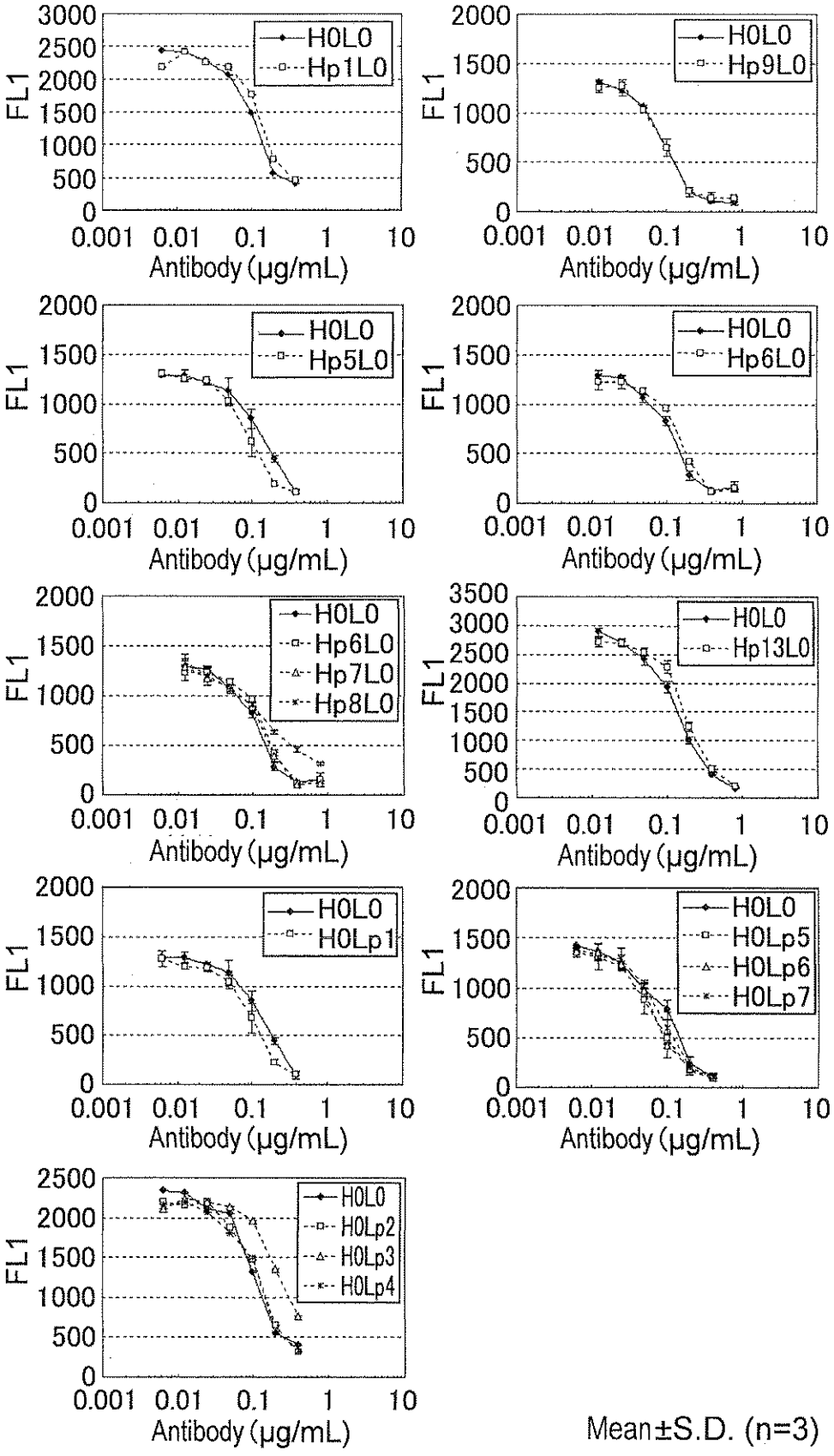

FL1
Antibody (μg/mL)
H0L0
Hp1L0
Hp9L0
Hp5L0
Hp6L0
Hp7L0
Hp8L0
Hp13L0
H0Lp1
H0Lp5
H0Lp6
H0Lp7
H0Lp2
H0Lp3
H0Lp4
Mean±S.D. (n=3)

FIG. 11

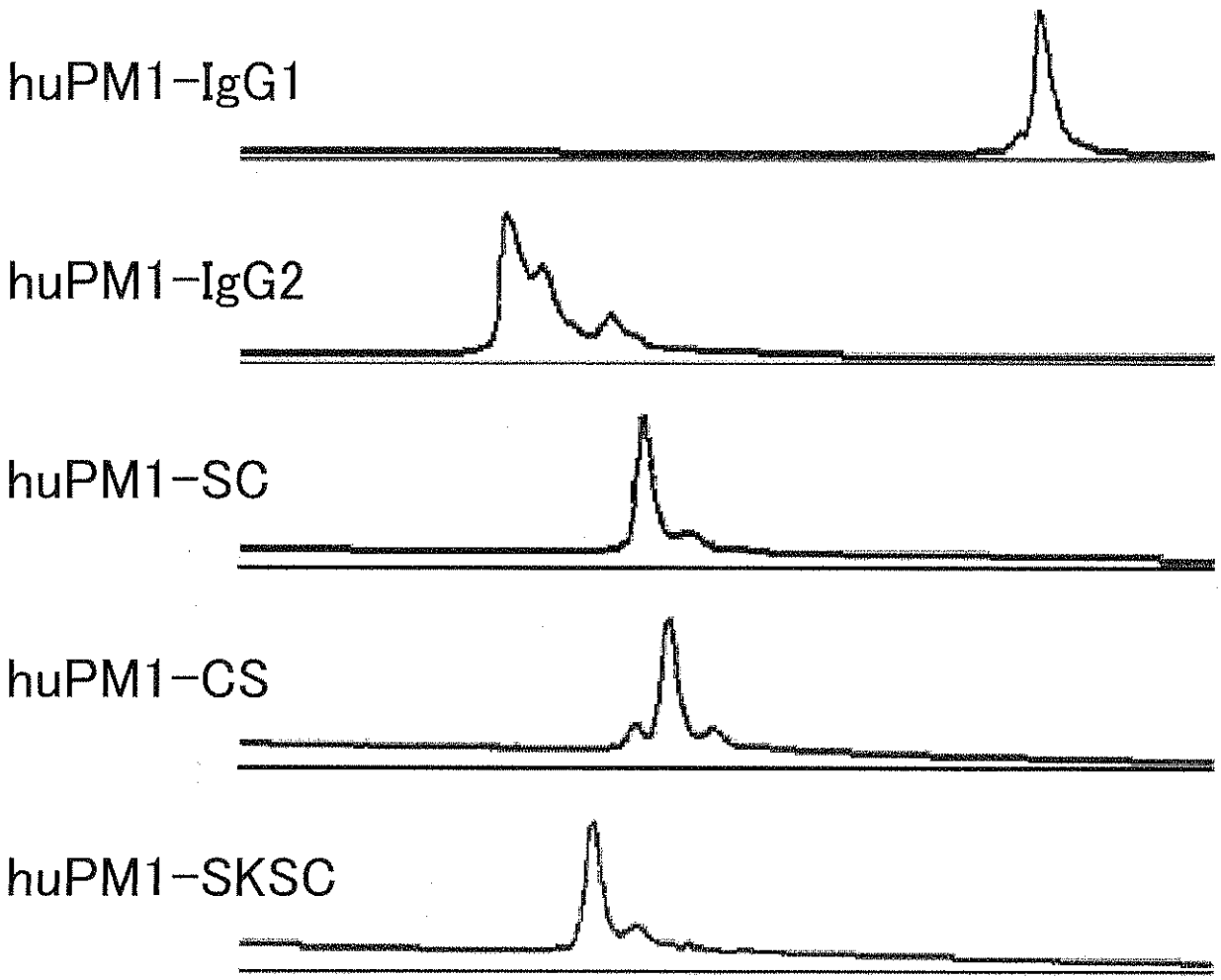


FIG. 12

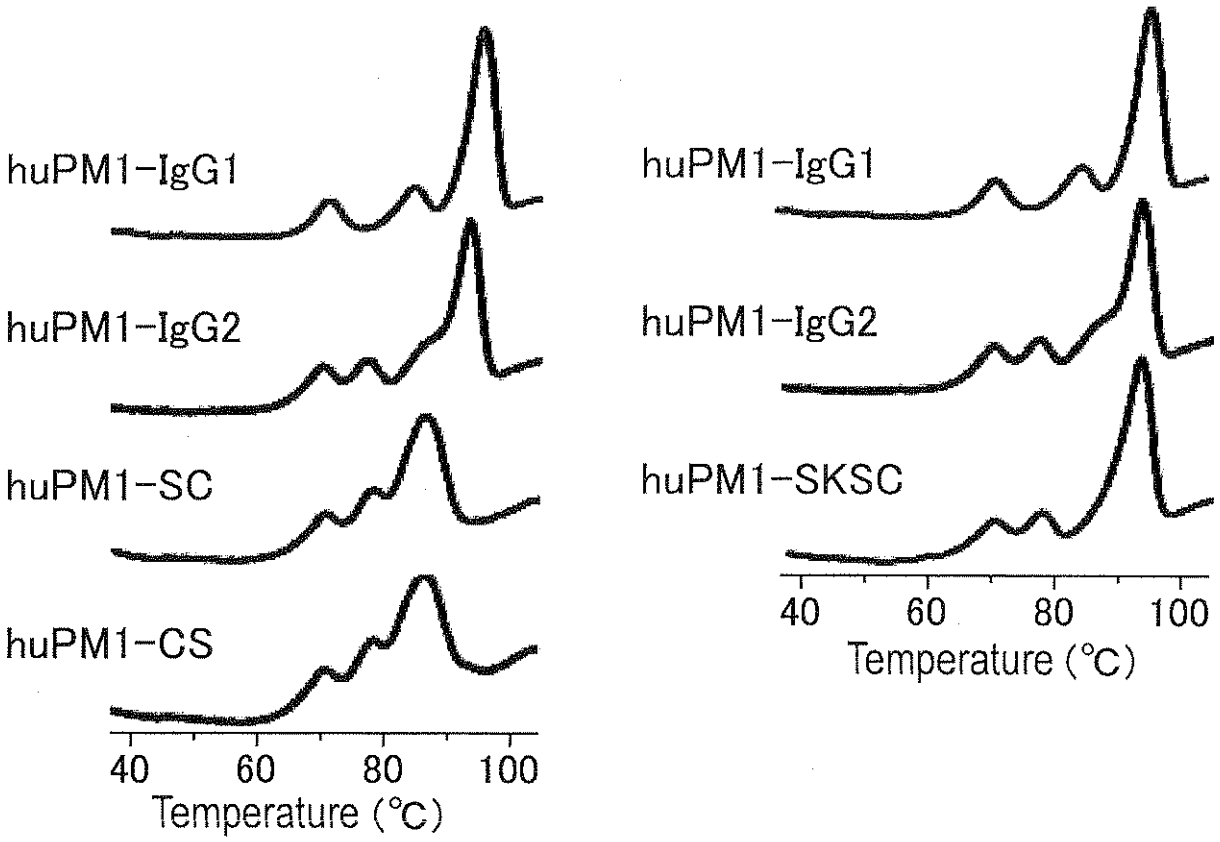

huPM1-IgG1
huPM1-IgG2
huPM1-SC
huPM1-CS
40
60
80
100
Temperature (℃)
huPM1-IgG1
huPM1-IgG2
huPM1-SKSC
40
60
80
100
Temperature (℃)

FIG. 13

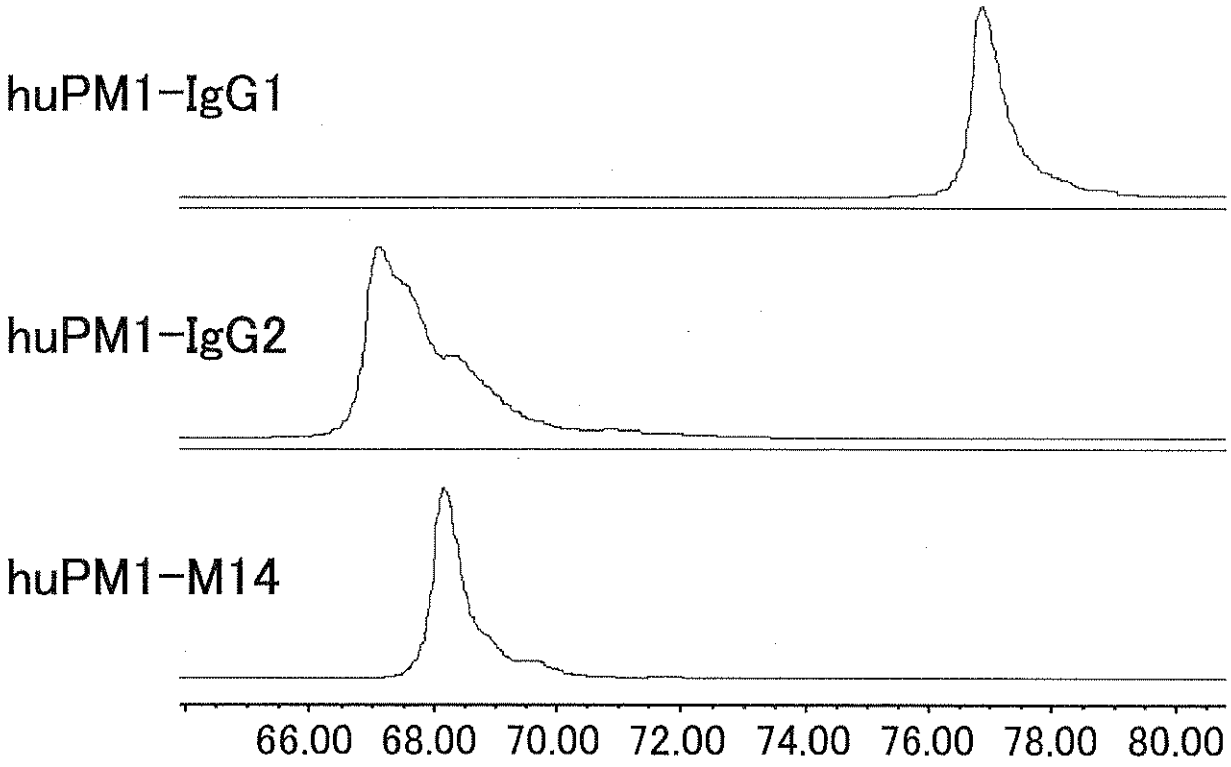

huPM1-IgG1
huPM1-IgG2
huPM1-M14
66.00
68.00
70.00
72.00
74.00
76.00
78.00
80.00

FIG. 14

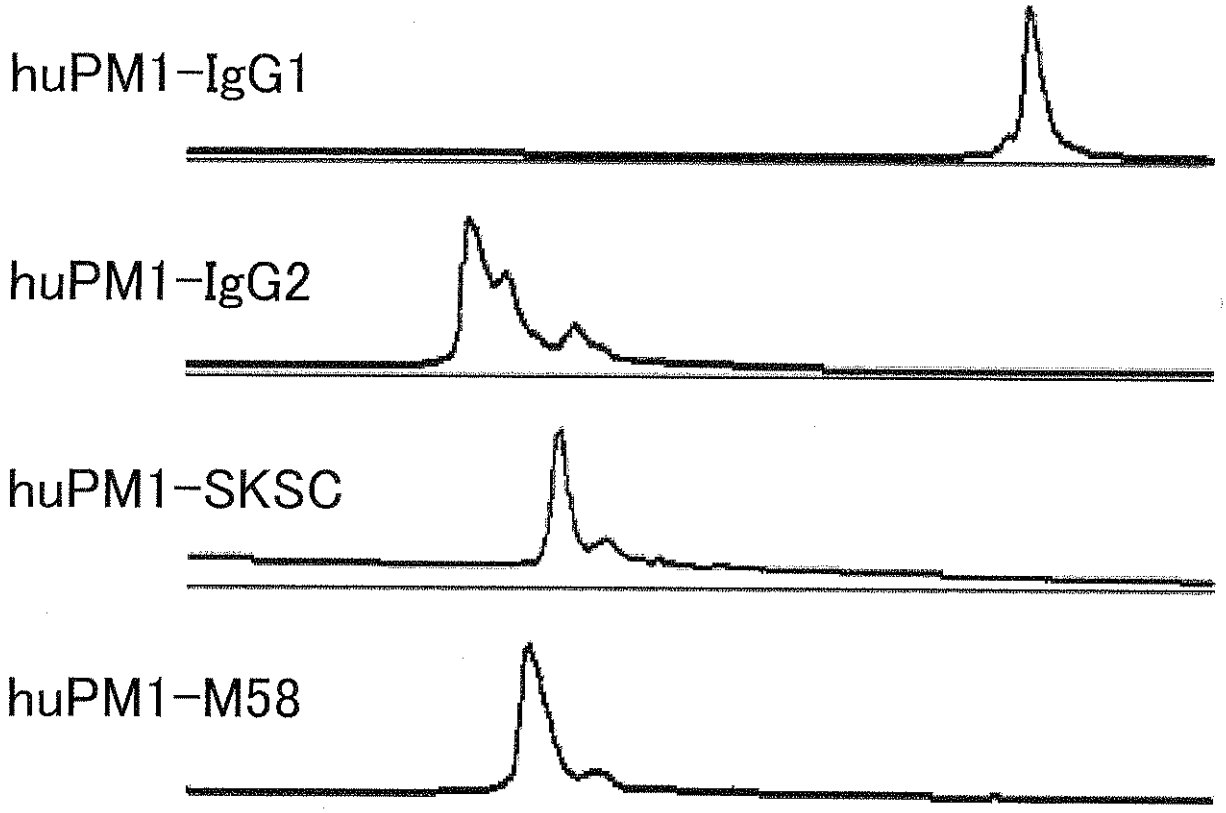


FIG. 15

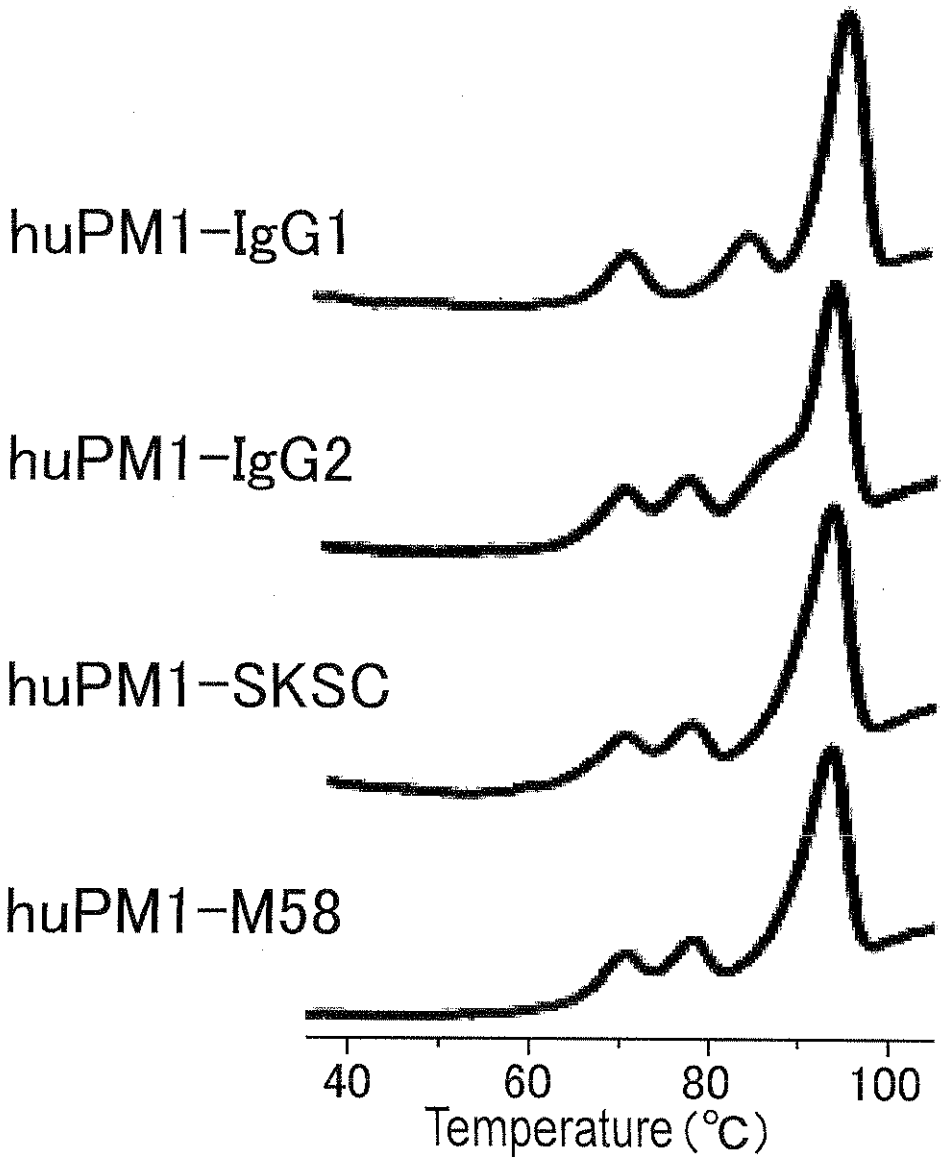

huPM1-IgG1
huPM1-IgG2
huPM1-SKSC
huPM1-M58
40
60
80
100
Temperature (°C)

FIG. 16

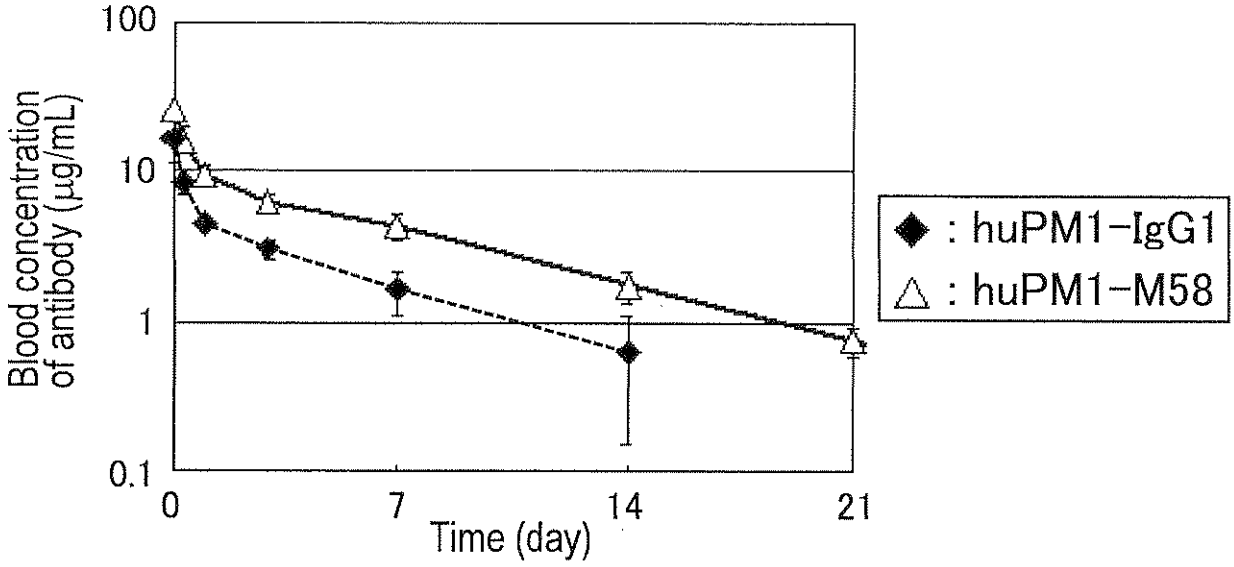

100
10
1
0.1
Blood concentration of antibody (μg/mL)
0
7
14
21
Time (day)
◆ : huPM1-IgG1
△ : huPM1-M58

FIG. 17

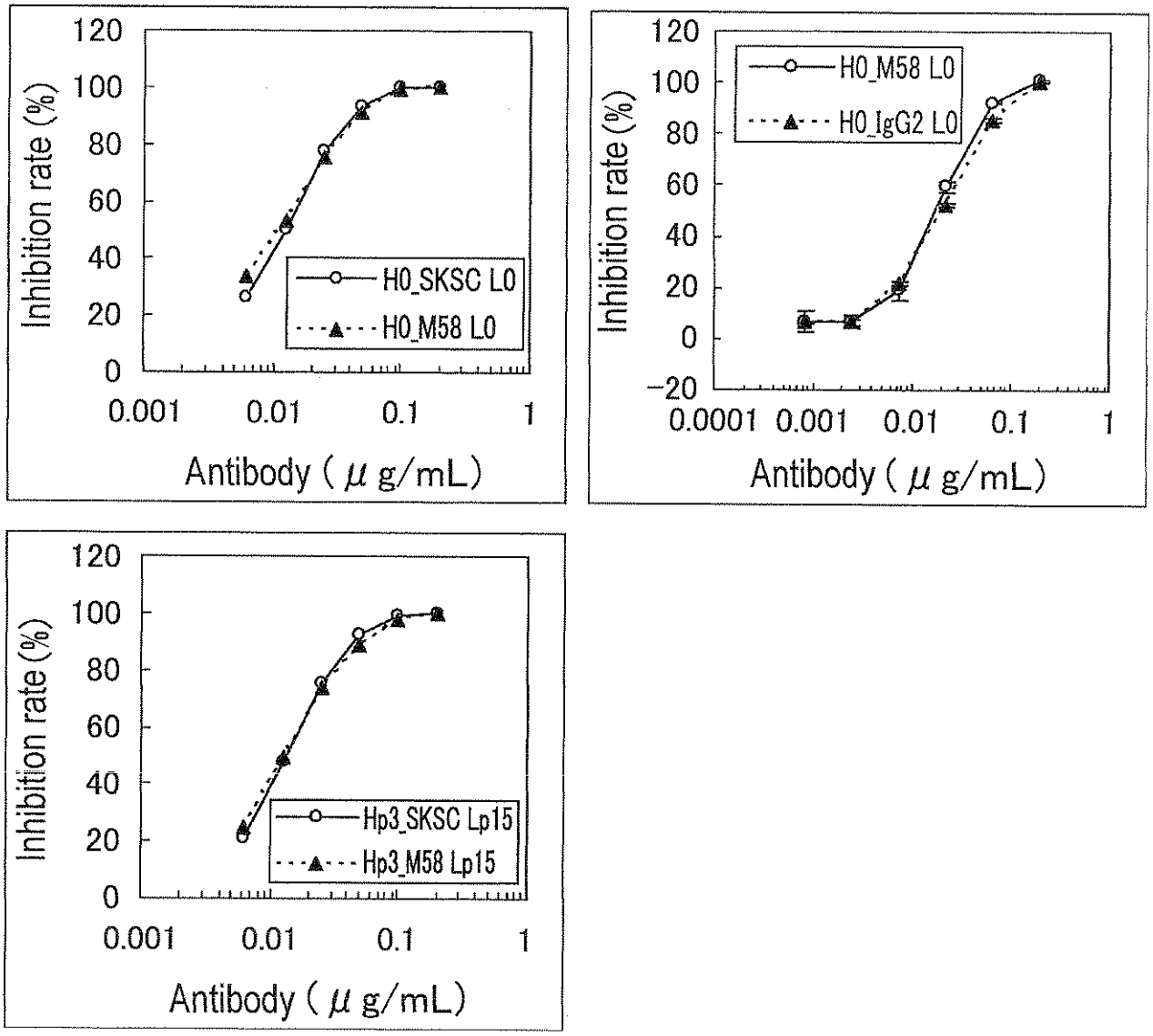

Inhibition rate (%)
120
100
80
60
40
20
0
0.001
0.01
0.1
1
Antibody (μ g/mL)
H0_SKSC L0
H0_M58 L0
Inhibition rate (%)
120
100
80
60
40
20
0
−20
0.0001
0.001
0.01
0.1
1
Antibody (μ g/mL)
H0_M58 L0
H0_IgG2 L0
Inhibition rate (%)
120
100
80
60
40
20
0
0.001
0.01
0.1
1
Antibody (μ g/mL)
Hp3_SKSC Lp15
Hp3_M58 Lp15

FIG. 18

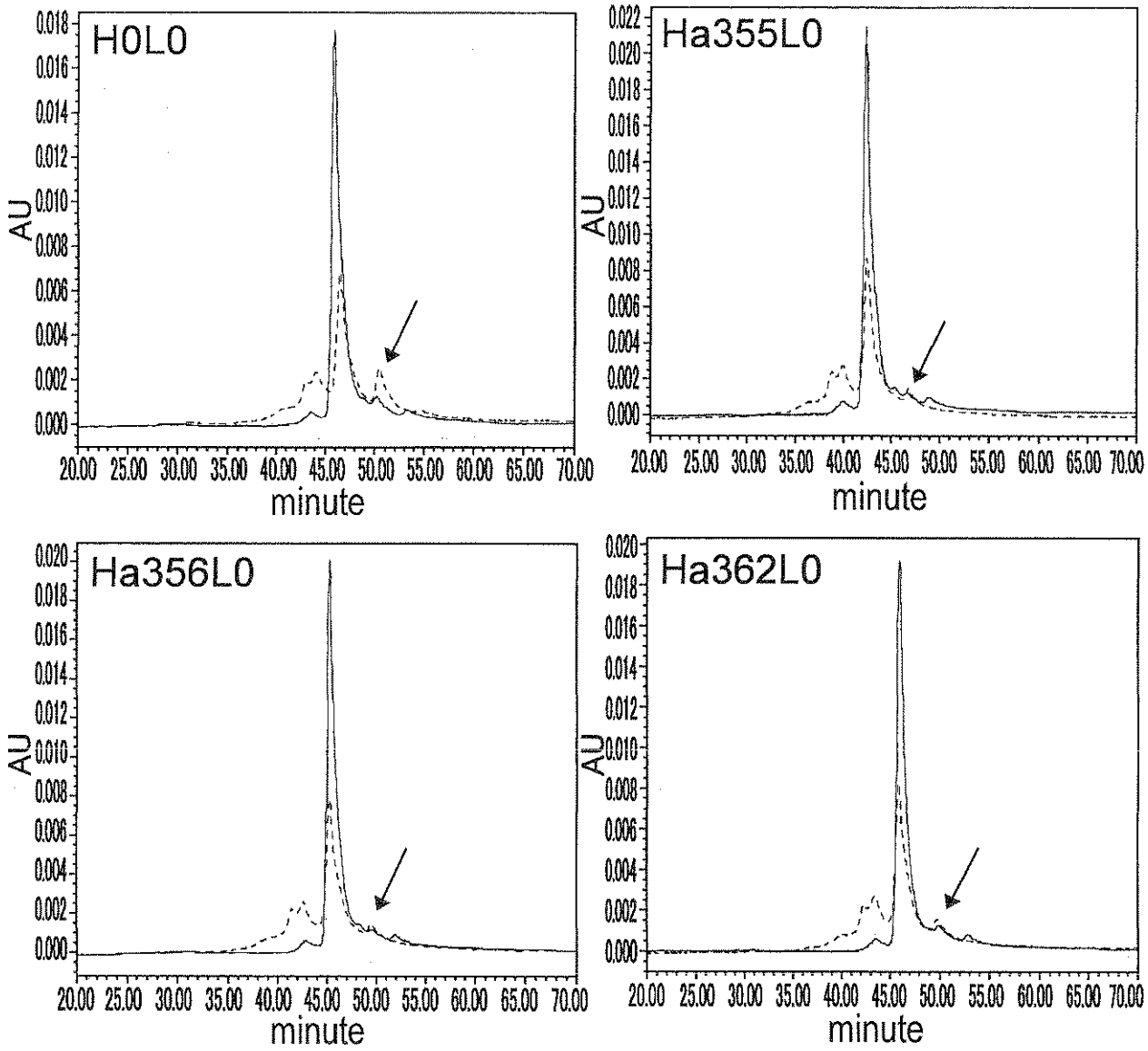

H0L0
Ha355L0
Ha356L0
Ha362L0
AU
minute
20.00 25.00 30.00 35.00 40.00 45.00 50.00 55.00 60.00 65.00 70.00

FIG. 19

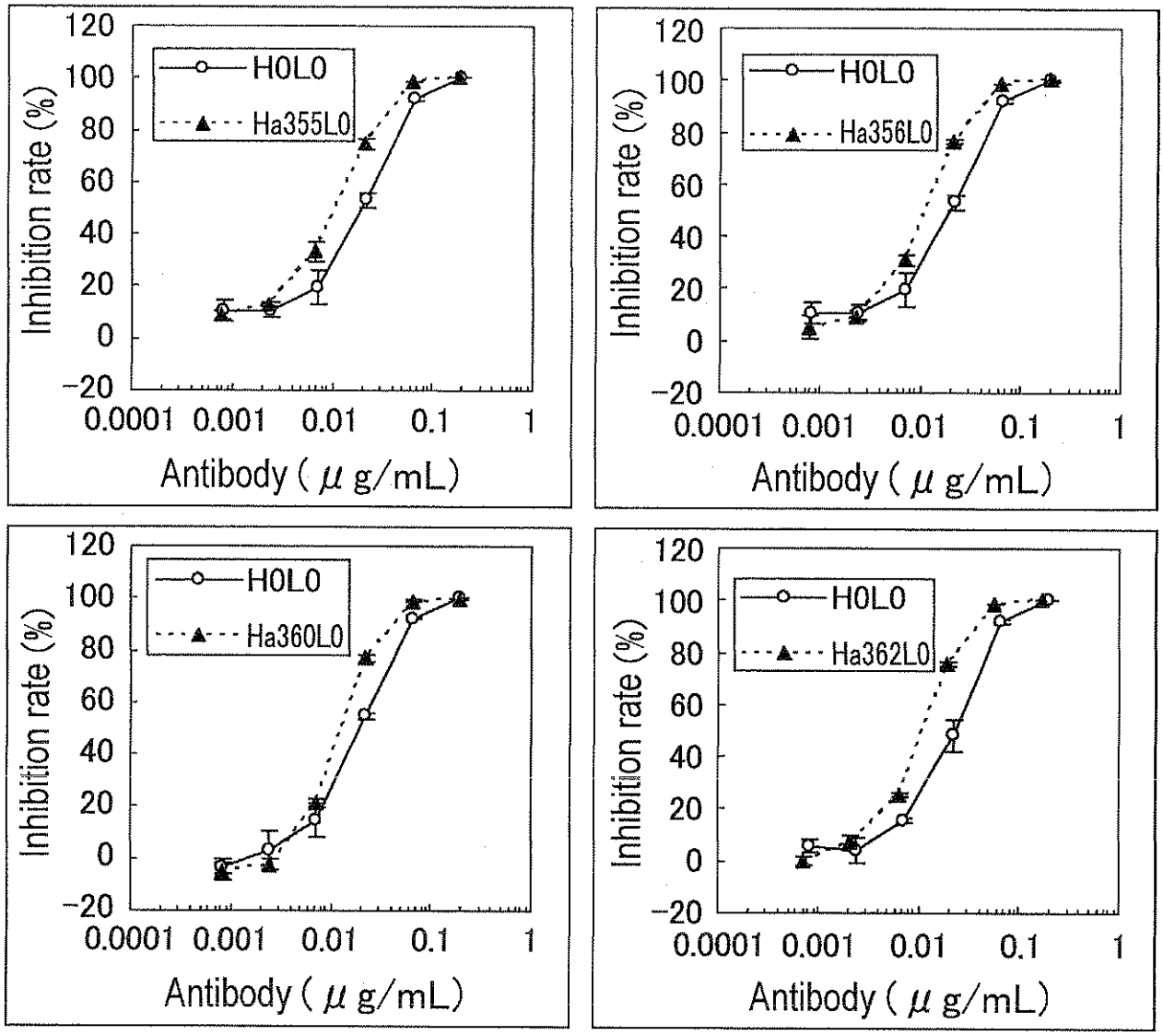

120
100
80
60
40
20
0
−20
Inhibition rate (%)
0.0001 0.001 0.01 0.1 1
Antibody (μ g/mL)
H0L0
Ha355L0
Ha356L0
Ha360L0
Ha362L0

FIG. 20

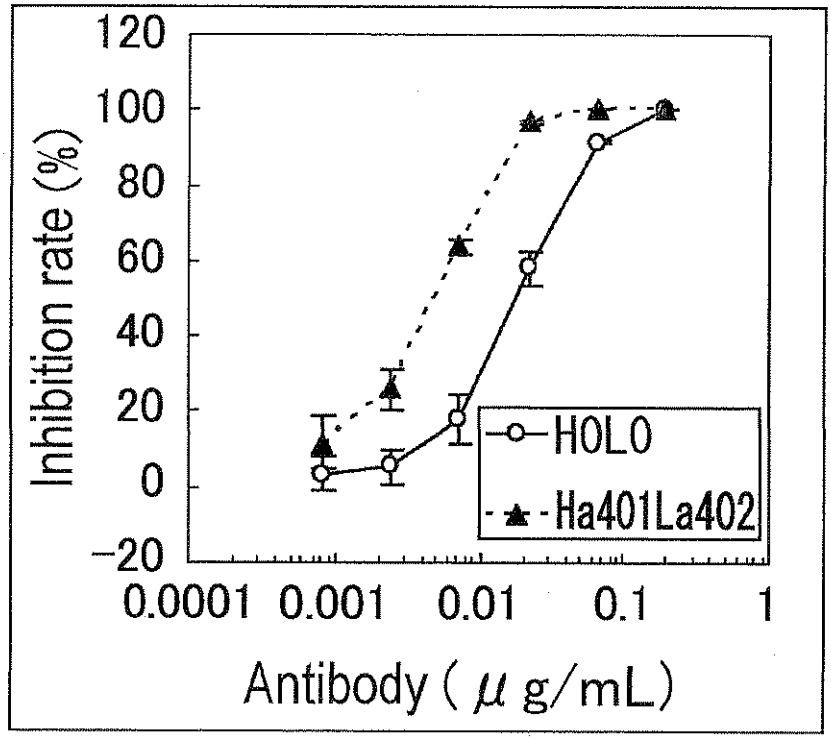

120
100
80
60
40
20
0
−20
Inhibition rate (%)
0.0001
0.001
0.01
0.1
1
Antibody (μg/mL)
H0L0
Ha401La402

FIG. 21

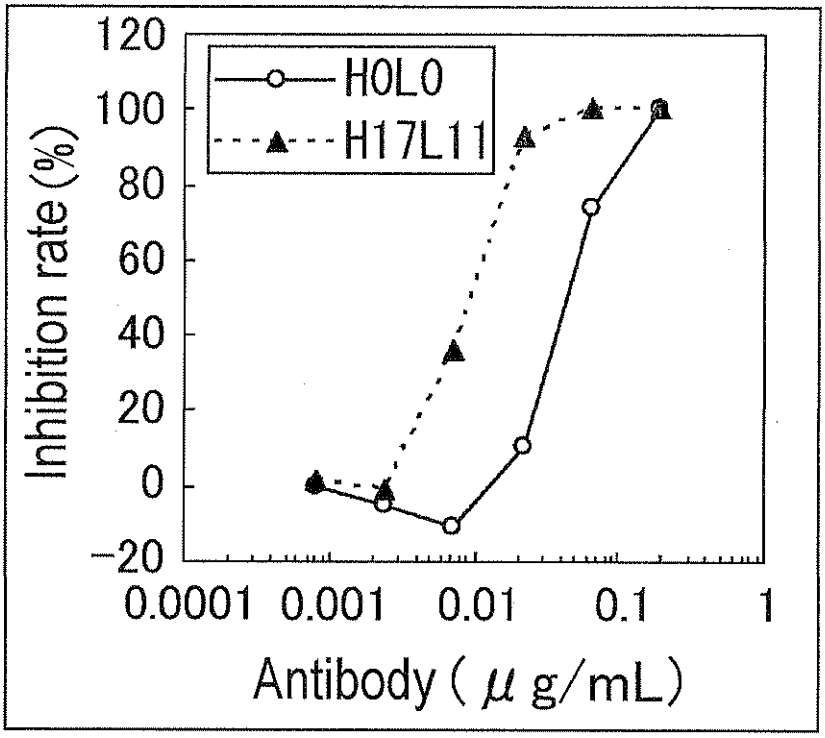

120
100
80
60
40
20
0
−20
Inhibition rate (%)
H0L0
H17L11
0.0001
0.001
0.01
0.1
1
Antibody (μ g/mL)

FIG. 22

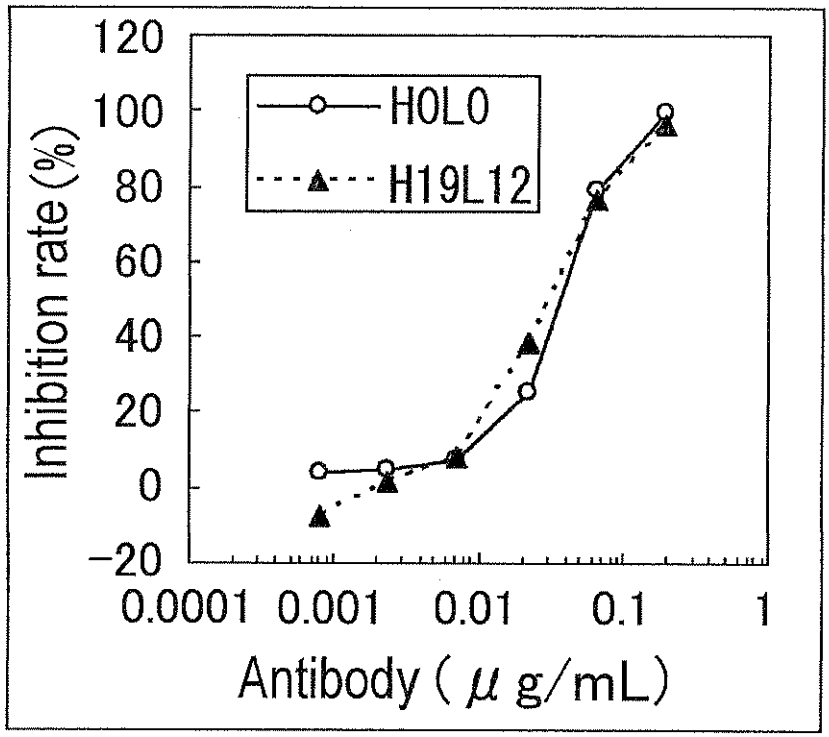

120
100
80
60
40
20
0
−20
Inhibition rate (%)
H0L0
H19L12
0.0001
0.001
0.01
0.1
1
Antibody (μ g/mL)

FIG. 23

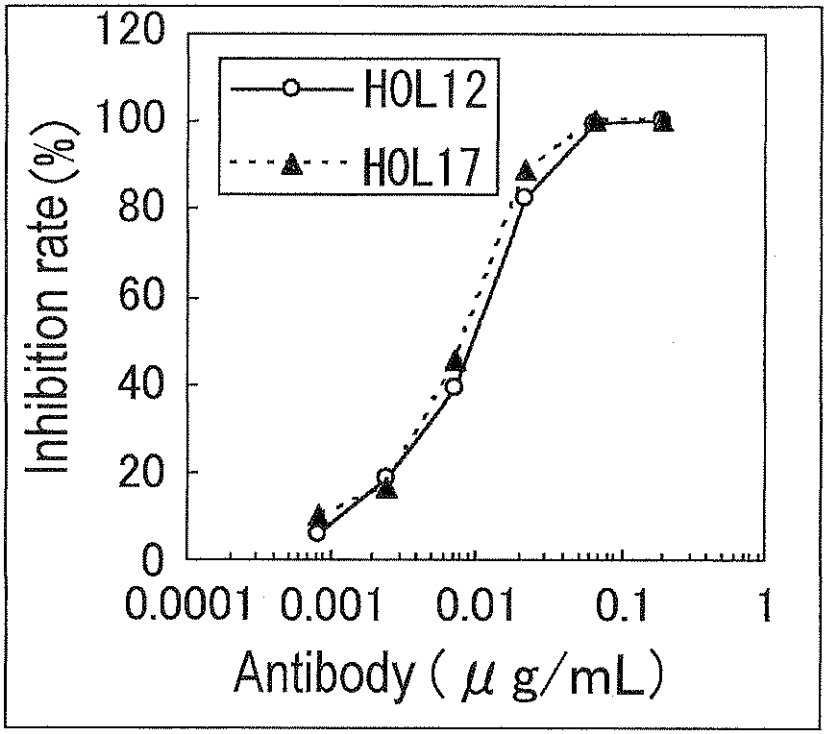

120
100
80
60
40
20
0
Inhibition rate (%)
H0L12
H0L17
0.0001
0.001
0.01
0.1
1
Antibody (μ g/mL)

FIG. 24

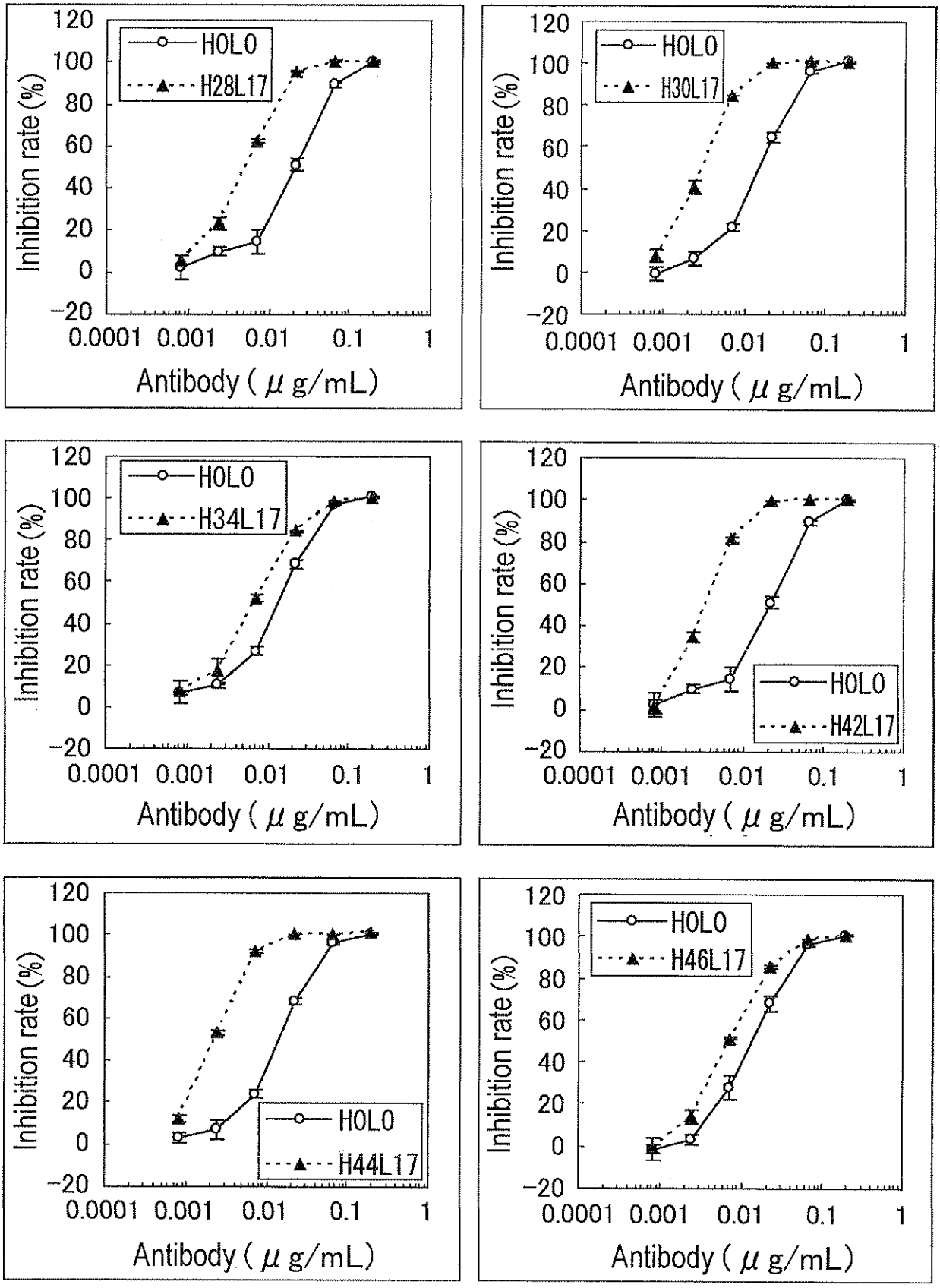

Inhibition rate (%)
120
100
80
60
40
20
0
−20
0.0001
0.001
0.01
0.1
1
Antibody (μ g/mL)
H0L0
H28L17
H30L17
H34L17
H42L17
H44L17
H46L17

FIG. 25-1

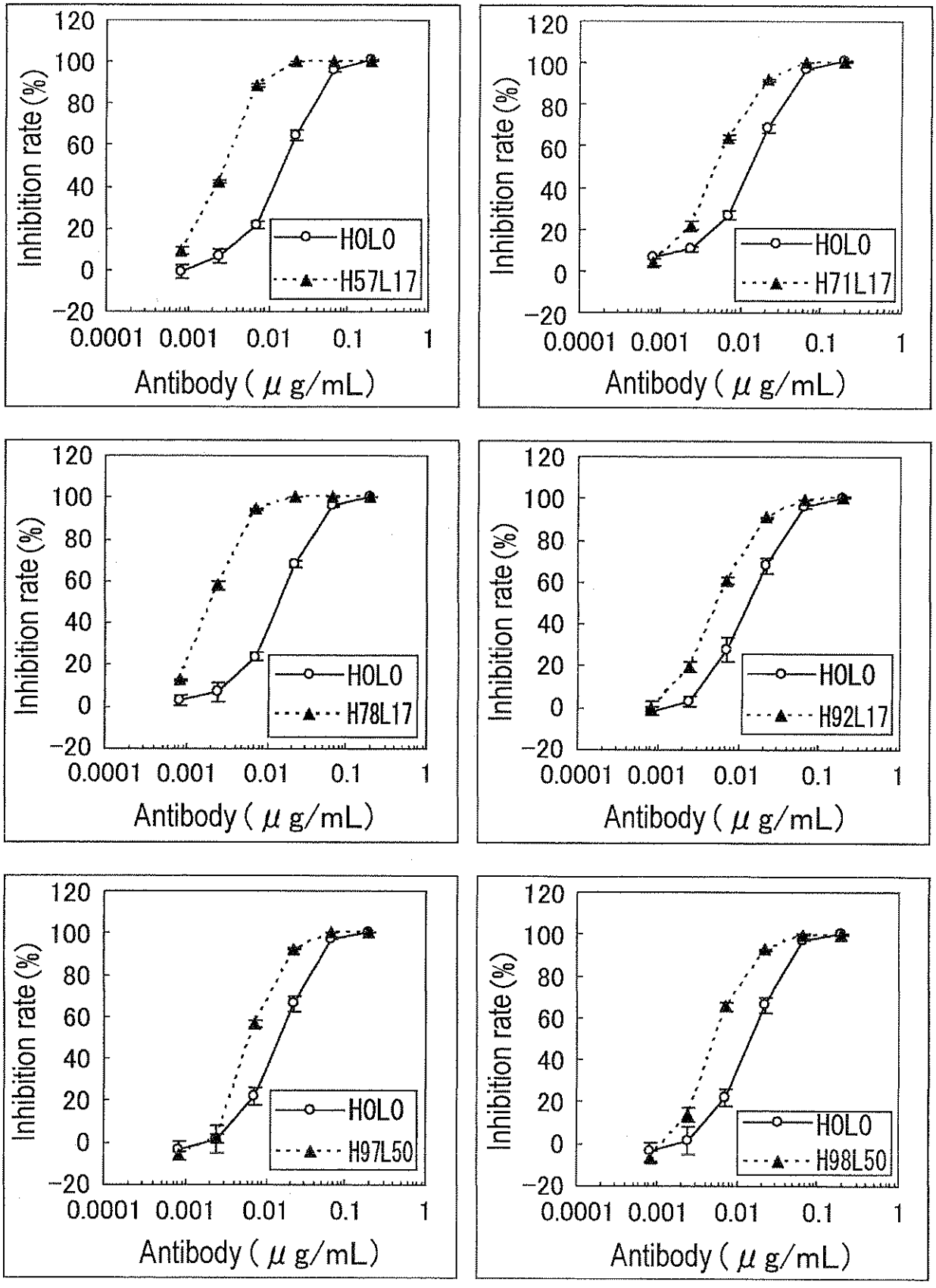

Inhibition rate (%)
120
100
80
60
40
20
0
−20
0.0001 0.001 0.01 0.1 1
Antibody (μ g/mL)
H0L0
H57L17
H71L17
H78L17
H92L17
H97L50
H98L50

FIG. 25-2

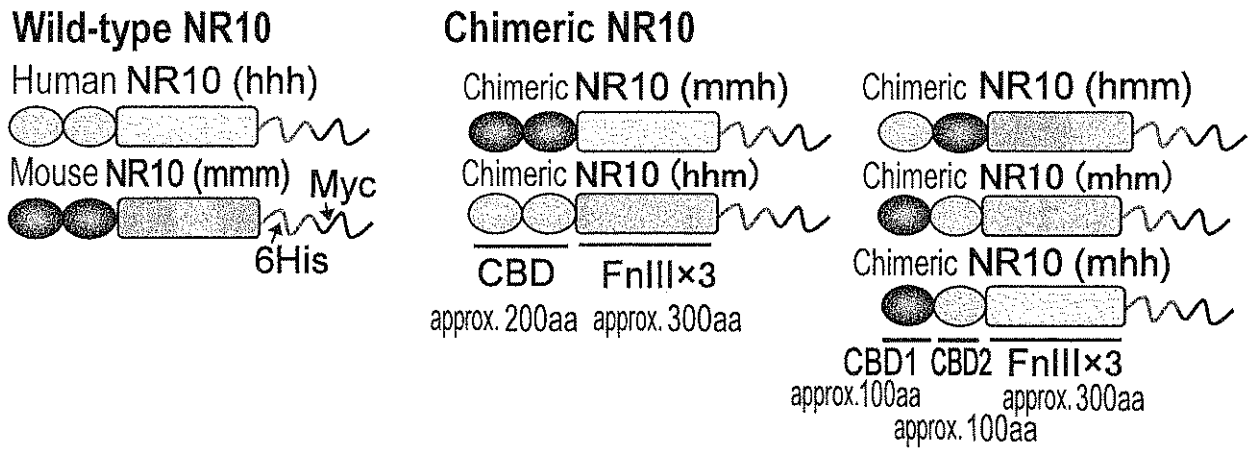

Wild-type NR10
Human NR10 (hhh)
Mouse NR10 (mmm)
Myc
6His
Chimeric NR10
Chimeric NR10 (mmh)
Chimeric NR10 (hhm)
CBD
FnIII×3
approx. 200aa
approx. 300aa
Chimeric NR10 (hmm)
Chimeric NR10 (mhm)
Chimeric NR10 (mhh)
CBD1
CBD2
FnIII×3
approx.100aa
approx. 300aa
approx. 100aa

FIG. 26

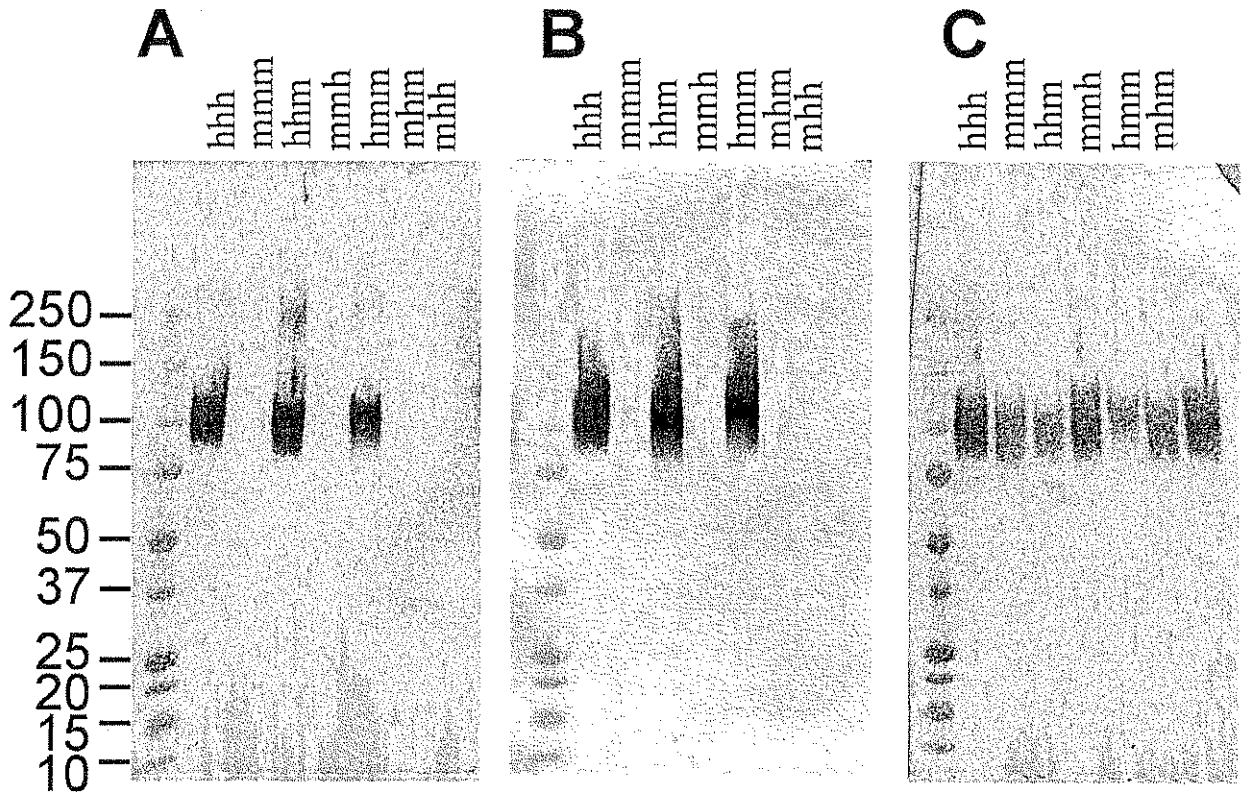

A
hhh
mmm
hhm
mmh
hmm
mhm
mhh
B
hhh
mmm
hhm
mmh
hmm
mhm
mhh
C
hhh
mmm
hhm
mmh
hmm
mhm
250
150
100
75
50
37
25
20
15
10

FIG. 27

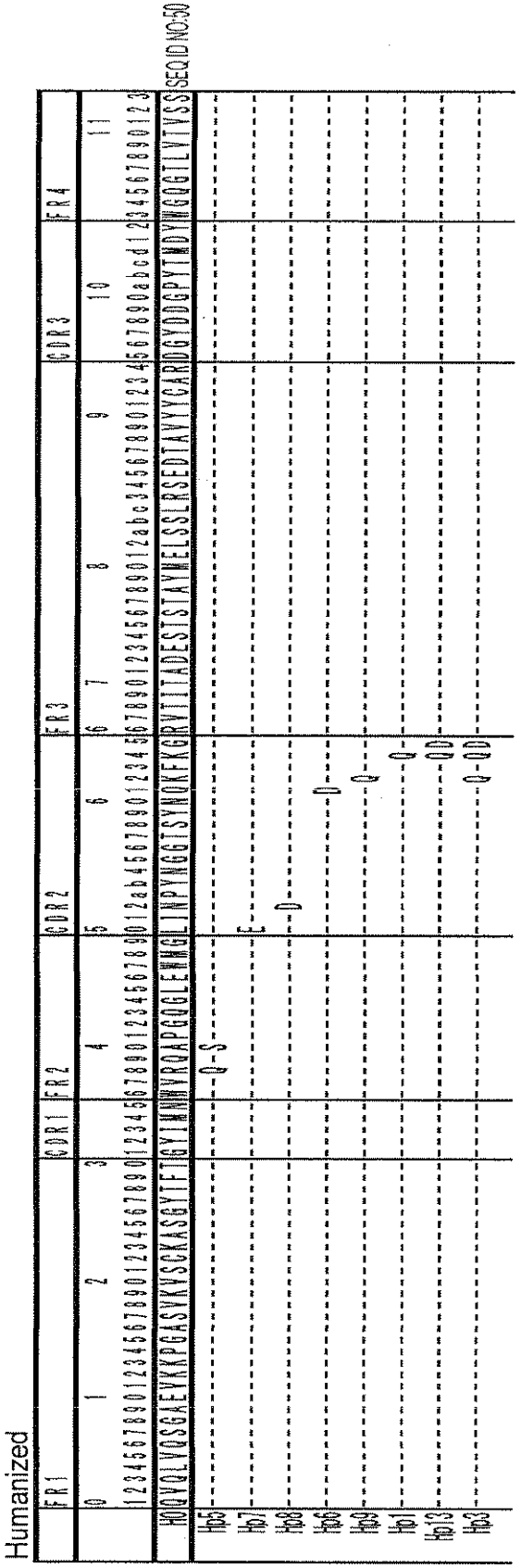
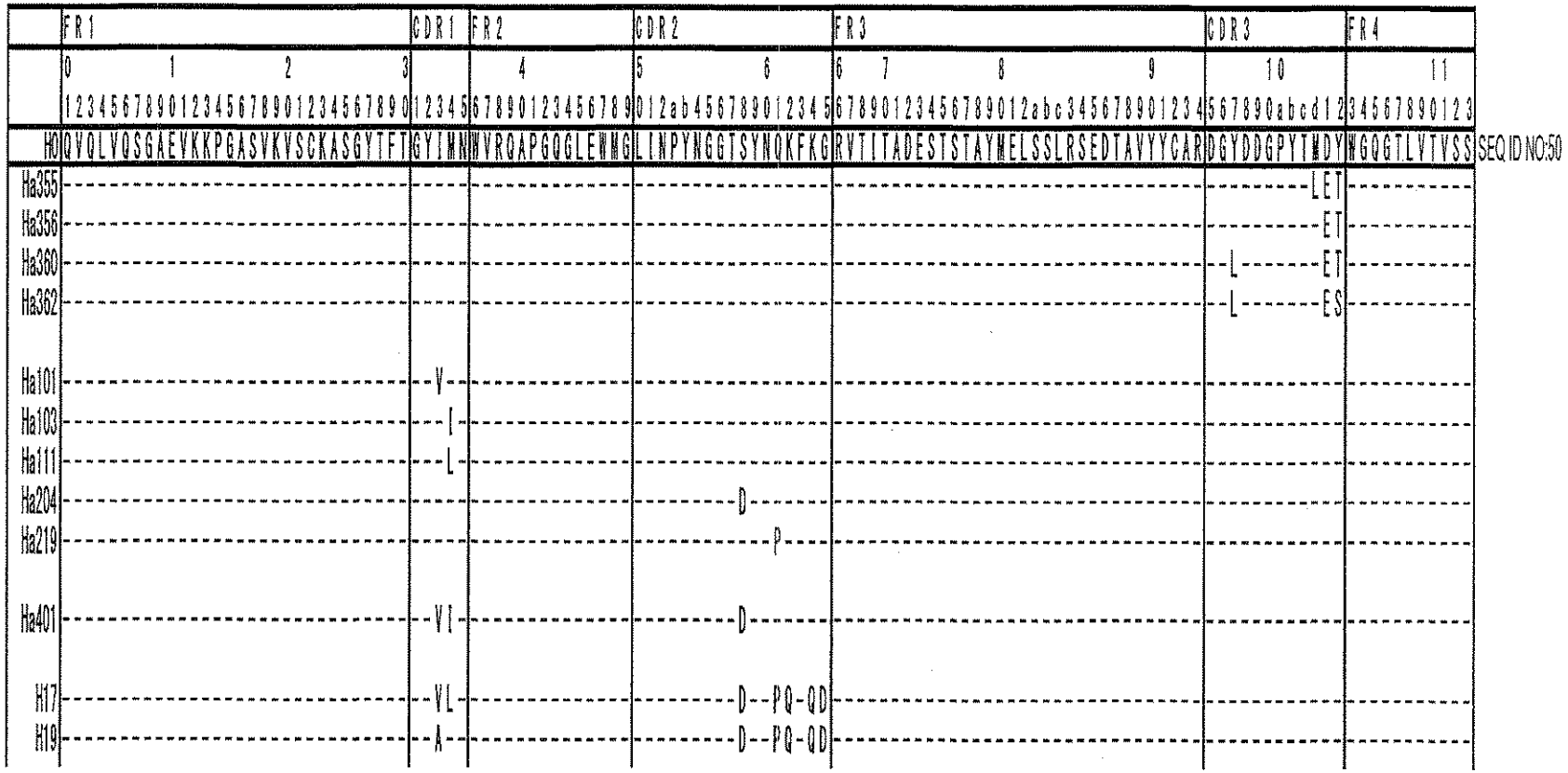
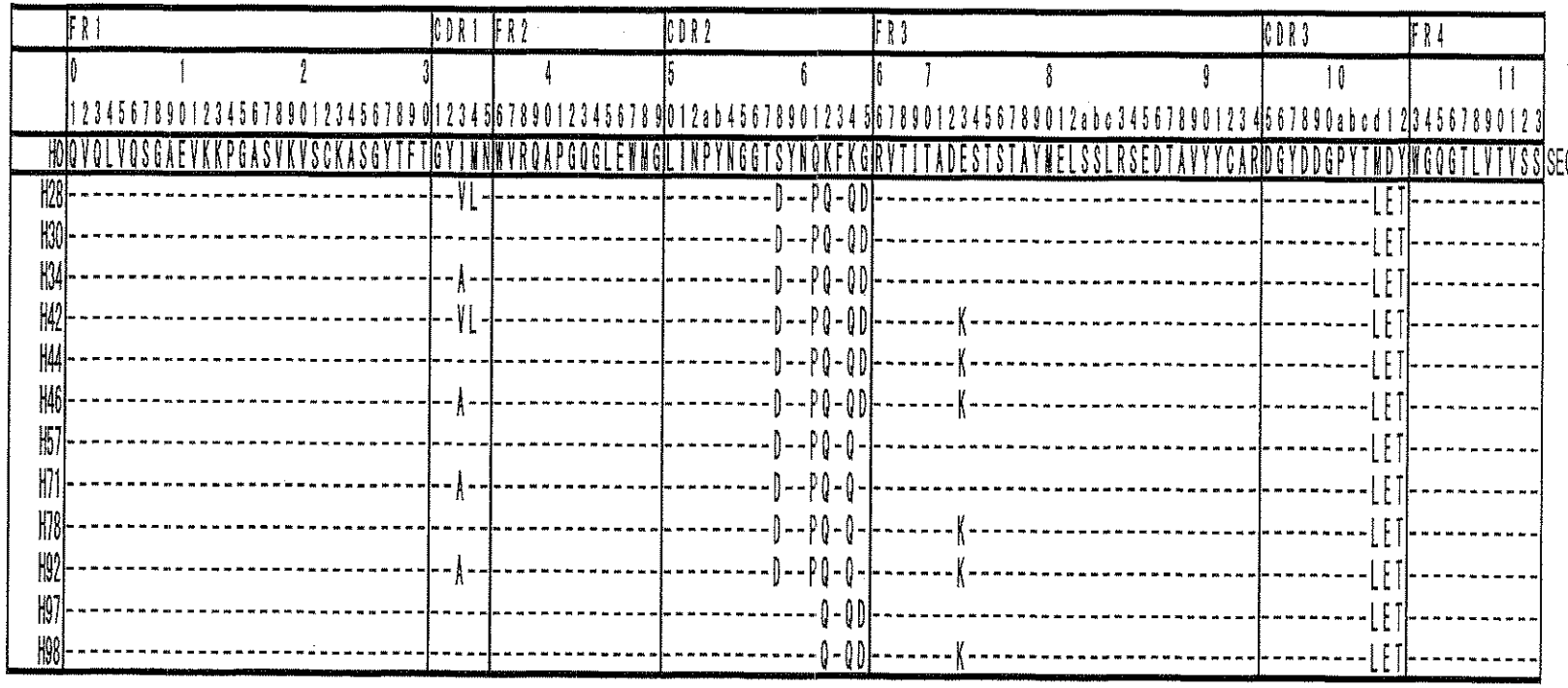

Humanized
FR1
CDR1
FR2
CDR2
FR3
CDR3
FR4
SEQ ID NO:50
Hb5
Hb7
Hb8
Hb6
Hb9
Hb1
Hb13
Hb3

FIG. 28-1



	FR1				CDR1	FR2		CDR2		FR3				CDR3		FR4	
	0	1	2	3		4		5	6	6	7	8	9	10		11	
	1234567890123456789012345678901				12345	6789012345678	9	012ab4567890123	45	6789012345678901	2abc3456789012	34	5678901abcd12	3456789012	3		
H0	QVQLVQSGAEVKKPGASVKVSCKASGYTFT				GYIMN	WVRQAPGQGLEWMG		LINPYNGGTSYNQKFKG		RVTITADESTSTAYMELSSLRSEDTAVYYCAR				DGYDDGPYTMDY		WGQGTLVTVSS	SEQ ID NO:50
Ha355															LET		
Ha356															ET		
Ha360														L	ET		
Ha362														L	ES		
Ha101					V												
Ha103					I												
Ha111					L												
Ha204								D									
Ha219								P									
Ha401					VI			D									
H17					VL			D	PQ-QD								
H19					A			D	PQ-QD								

FIG. 28-2



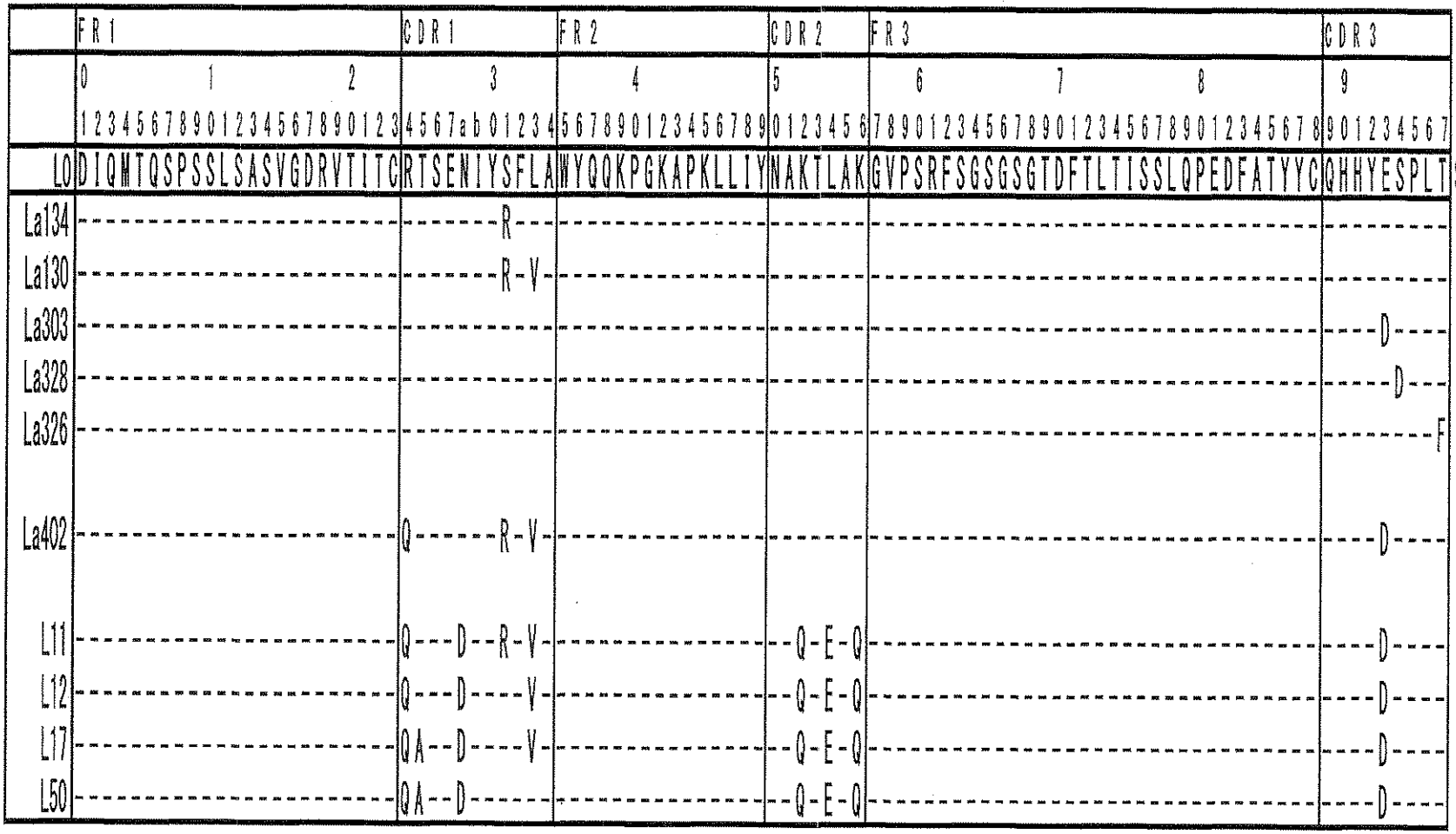
	FR1				CDR1	FR2		CDR2		FR3				CDR3		FR4	
	0	1	2	3		4		5	6	6	7	8	9	10		11	
	1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0				1 2 3 4 5	6 7 8 9 0 1 2 3 4 5 6 7 8 9		0 1 2 a b 4 5 6 7 8 9 0 1 2 3 4 5		6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 a b c 3 4 5 6 7 8 9 0 1 2 3 4				5 6 7 8 9 0 a b c d 1 2		3 4 5 6 7 8 9 0 1 2 3	
H0	QVQLVQSGAEVKKPGASVKVSCKASGYTFT				GYIMN	WVRQAPGQGLEWMG		LINPYNGGTSYNQKFKG		RVTITADESTSTAYMELSSLRSEDTAVYYCAR				DGYDDGPYTMDY		WGQGTLVTVSS	SEQ ID NO:50
H28	----------	----------	----------	----------	--VL-	----------	----------	---------D--PQ-QD	----------	----------	----------	----------	----------	---------LET	----------	----------	
H30	----------	----------	----------	----------	-----	----------	----------	---------D--PQ-QD	----------	----------	----------	----------	----------	---------LET	----------	----------	
H34	----------	----------	----------	----------	--A--	----------	----------	---------D--PQ-QD	----------	----------	----------	----------	----------	---------LET	----------	----------	
H42	----------	----------	----------	----------	--VL-	----------	----------	---------D--PQ-QD	----------	-------K	----------	----------	----------	---------LET	----------	----------	
H44	----------	----------	----------	----------	-----	----------	----------	---------D--PQ-QD	----------	-------K	----------	----------	----------	---------LET	----------	----------	
H46	----------	----------	----------	----------	--A--	----------	----------	---------D--PQ-QD	----------	-------K	----------	----------	----------	---------LET	----------	----------	
H57	----------	----------	----------	----------	-----	----------	----------	---------D--PQ-Q-	----------	----------	----------	----------	----------	---------LET	----------	----------	
H71	----------	----------	----------	----------	--A--	----------	----------	---------D--PQ-Q-	----------	----------	----------	----------	----------	---------LET	----------	----------	
H78	----------	----------	----------	----------	-----	----------	----------	---------D--PQ-Q-	----------	-------K	----------	----------	----------	---------LET	----------	----------	
H92	----------	----------	----------	----------	--A--	----------	----------	---------D--PQ-Q-	----------	-------K	----------	----------	----------	---------LET	----------	----------	
H97	----------	----------	----------	----------	-----	----------	----------	----------Q-QD	----------	----------	----------	----------	----------	---------LET	----------	----------	
H98	----------	----------	----------	----------	-----	----------	----------	----------Q-QD	----------	-------K	----------	----------	----------	---------LET	----------	----------	

FIG. 28-3

Humanized

	FR1			CDR1	FR2	CDR2	FR3			CDR3	
	0	1	2	3	4	5	6	7	8	9	
	1234567890123456789012345			4567ab01234	56789012345678901	23456	7890123456789012345678901234567			8901234567	
L0	DIQMTQSPSSLSASVGDRVTITC			RTSENIYSFLA	WYQQKPGKAPKLLIY	NAKTLAK	GVPSRFSGSGSGTDFTLTISSLQPEDFATYYC			QHHYESPLT	SEQ ID NO: 52
Lp1	----------	----------	----------	Q----------	----------	-------	----------	----------	----------	---------	
Lp2	----------	----------	----------	----D------	----------	-------	----------	----------	----------	---------	
Lp3	----------	----------	----------	----------	----------	D------	----------	----------	----------	---------	
Lp4	----------	----------	----------	----------	----------	-Q-----	----------	----------	----------	---------	
Lp7	----------	----------	----------	----------	----------	--E----	----------	----------	----------	---------	
Lp5	----------	----------	----------	----------	----------	----Q--	----------	----------	----------	---------	
Lp6	----------	----------	----------	----------	----------	----D--	----------	----------	----------	---------	
Lp15	----------	----------	----------	Q---D-----	----------	-Q-E-Q-	----------	----------	----------	---------	

FIG. 29-1



	FR1			CDR1		FR2	CDR2	FR3			CDR3	
	0	1	2	3		4	5	6	7	8	9	
	1234567890123456789012345			6789ab01234		56789012345678901	23456	789012345678901234567890123456789012345678			90123456789	
L0	DIQMTQSPSSLSASVGDRVTITC			RTSENIYSFLA		WYQQKPGKAPKLLIY	NAKTLAK	GVPSRFSGSGSGTDFTLTISSLQPEDFATYYC			QHHYESPLT	SEQ ID NO:52
La134				R								
La130				R-V								
La303											D	
La328											D	
La326											F	
La402				Q R-V							D	
L11				Q D R-V			Q-E-Q				D	
L12				Q D V			Q-E-Q				D	
L17				QA D V			Q-E-Q				D	
L50				QA D			Q-E-Q				D	

FIG. 29-2