CAGGTGCAGCTACAGCAGTGGGGCGCAGGACTGTTGAAGCCTTCGGAGACCCTGGCCCTCACCTGCGCTGTCTCT
GGTGGGTCCTTCACTGATCATTACTGGAGTTGGATCCGTCAGGCCCCAGGGAAGGGGCTGGAGTGGATTGGAGAA
ATCAATCATAGTGGAGTCACCAACTACAACCCGTCCCTCAAGAGTCGACTCACCATATCAGTAGACACGTCCAAG
AGCCAGTTCTCCCTGAGGCTGACCTCTGTGACCGCCGCGGACACGGCTCTGTACTACTGTGCGAAAACTGGCCTG
TATTATGATGACGTTTGGGGGACTTTTCGTCCACGGGGCGGGTTCGACTCCTGGGGCCAGGGAACCCTGGTCACC
GTCTCCTCA (SEQ ID NO: 1)

FIG. 1

Q	V	Q	L	Q	Q	W	G	A	G	L	L	K	P	S	E	T	L	A	L	T	C	A	V	S
G	G	S	F	T	D	H	Y	W	S	W	I	R	Q	A	P	G	K	G	L	E	W	I	G	E
I	N	H	S	G	V	T	N	Y	N	P	S	L	K	S	R	L	T	I	S	V	D	T	S	K
S	Q	F	S	L	R	L	T	S	V	T	A	A	D	T	A	L	Y	Y	C	A	K	T	G	L
Y	Y	D	D	V	W	G	T	F	R	P	R	G	G	F	D	S	W	G	Q	G	T	L	V	T
V	S	S	(SEQ ID NO: 2)																					

FIG. 2

GACATCGTGATGACCCAGTCTCCGGACTCCCTGGCTGTGTCTCTGGGCGAGAGGGCCACCATCAACTGCAAGTCC
AGCCAGAGTATTTTATATAGCTCCGACAATAAGAATTACTTAGCTTGGTACCAGCACAAGCCAGGACAGCCTCCT
AAGCTCCTCTTTTACTGGGCATCTATCCGGGAATCCGGGGTCCCTGACCGATTCAGTGGCGGCGGGTCTGGGACA
GATTTCACTCTCACCATCAGCAGTCTGCAGGCTGAAGATGTGGCAGTTTATTACTGTCAGCAATATTATAGTCCT
CCTTGCAGTTTTGGCCAGGGGACCAAGCTGGAGATCCAA (SEQ ID NO: 10)

FIG. 3

D	I	V	M	T	Q	S	P	D	S	L	A	V	S	L	G	E	R	A	T	I	N	C	K	S
S	Q	S	I	L	Y	S	S	D	N	K	N	Y	L	A	W	Y	Q	H	K	P	G	Q	P	P
K	L	L	F	Y	W	A	S	I	R	E	S	G	V	P	D	R	F	S	G	G	G	S	G	T
D	F	T	L	T	I	S	S	L	Q	A	E	D	V	A	V	Y	Y	C	Q	Q	Y	Y	S	P
P	C	S	F	G	Q	G	T	K	L	E	I	Q	(SEQ ID NO: 11)											

FIG. 4

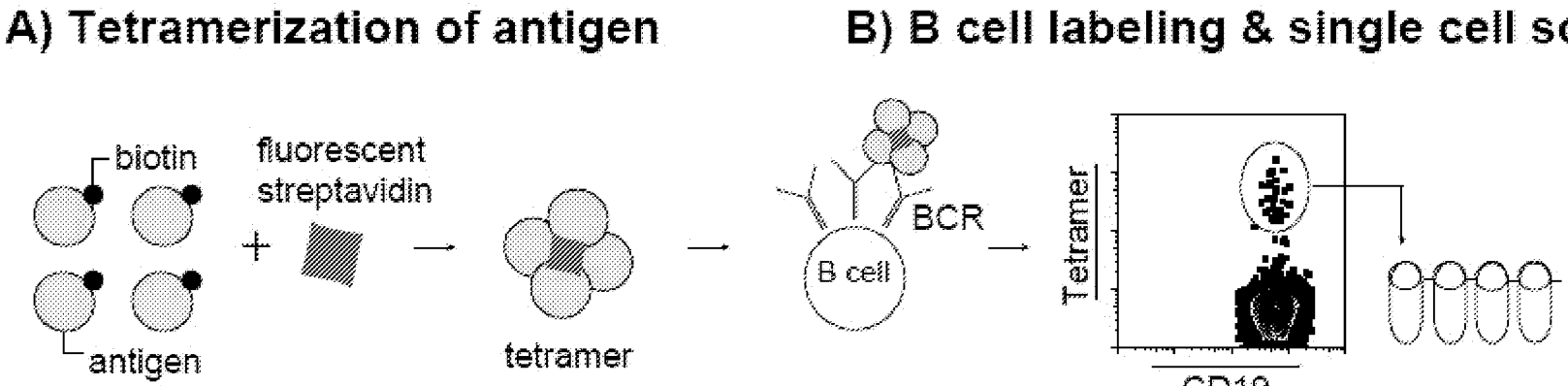


FIG. 5A

FIG. 5B

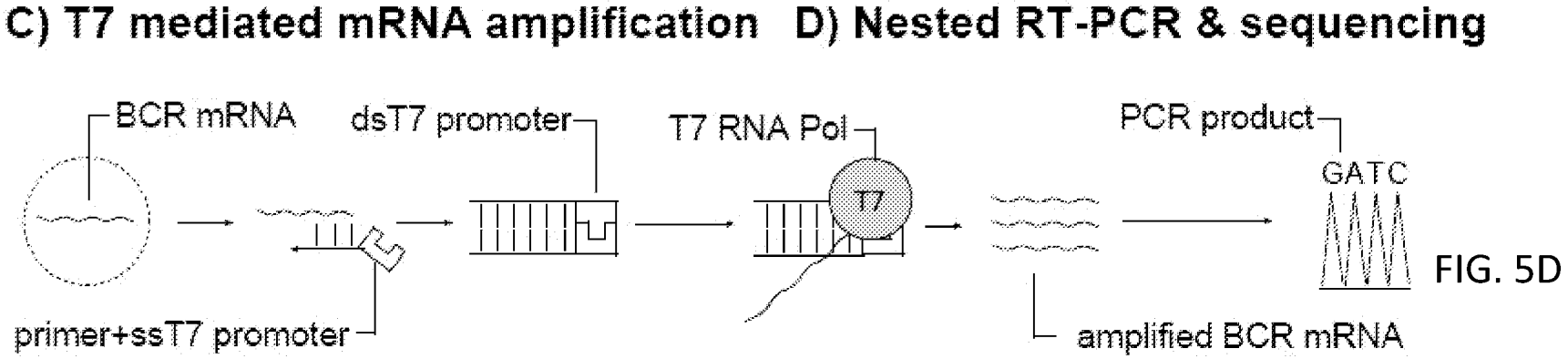


FIG. 5C

FIG. 5D

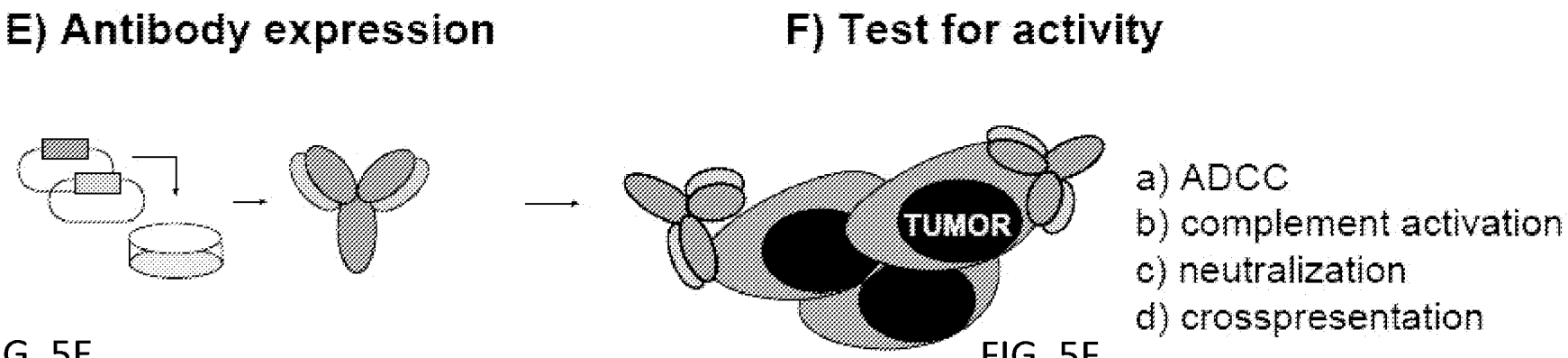


FIG. 5E

FIG. 5F

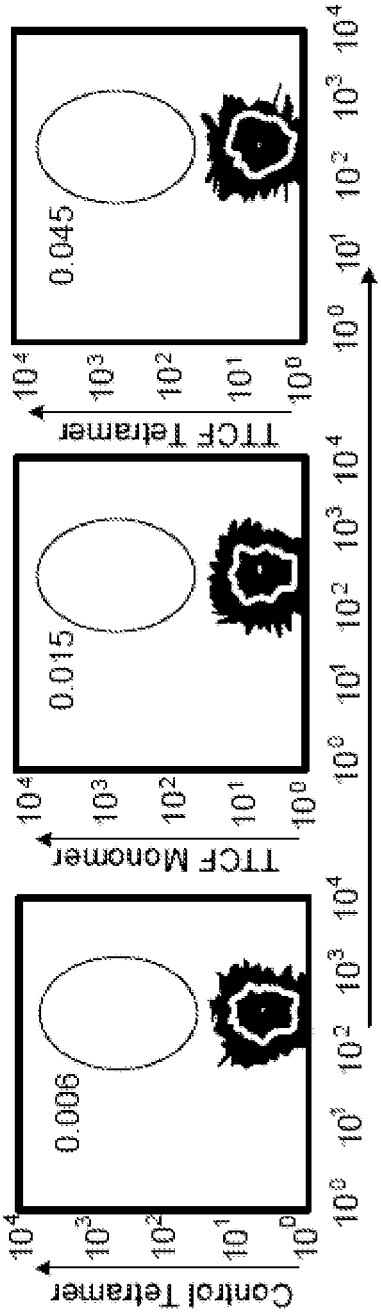


FIG. 6A

	Control Tet/ 10^5 B cells	TTCF Moncmer/ 10^4 B cells	TTCF Tet/# 10^4 B cells	#Tet/#Mono Foldchange
Donor 1	3.98	2.53	18.41	7.3
Donor 2	15.03	38.64	117.18	3.1
Donor 3	4.14	48.92	77.55	1.6

FIG. 6B

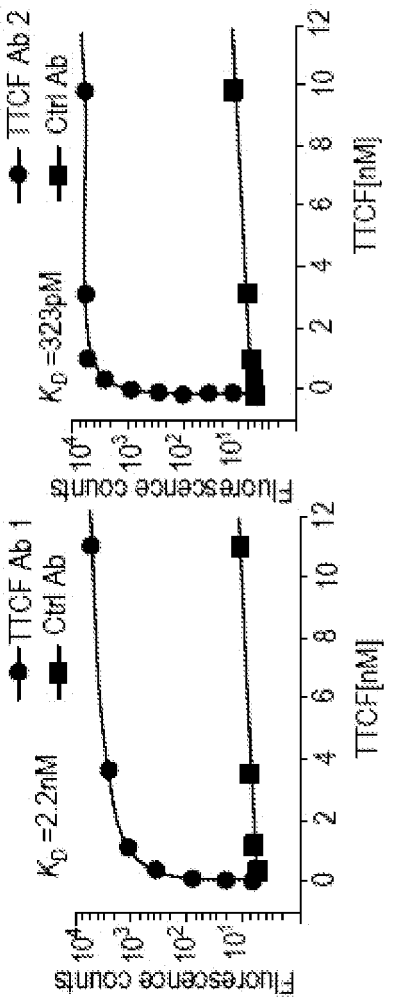

TTCF Ab 1
Ctrl Ab
K_D =2.2nM
Fluorescence counts
TTCF[nM]
TTCF Ab 2
Ctrl Ab
K_D =323pM
Fluorescence counts
TTCF[nM]

FIG. 7A

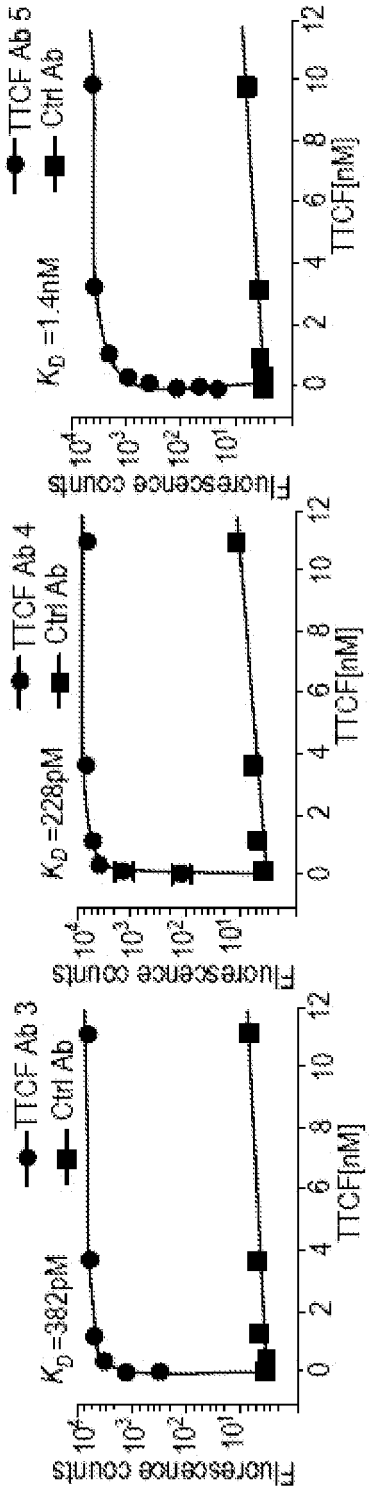

TTCF Ab 3
Ctrl Ab
K_D =382pM
Fluorescence counts
TTCF[nM]
TTCF Ab 4
Ctrl Ab
K_D =228pM
Fluorescence counts
TTCF[nM]
TTCF Ab 5
Ctrl Ab
K_D =1.4nM
Fluorescence counts
TTCF[nM]

FIG. 7B

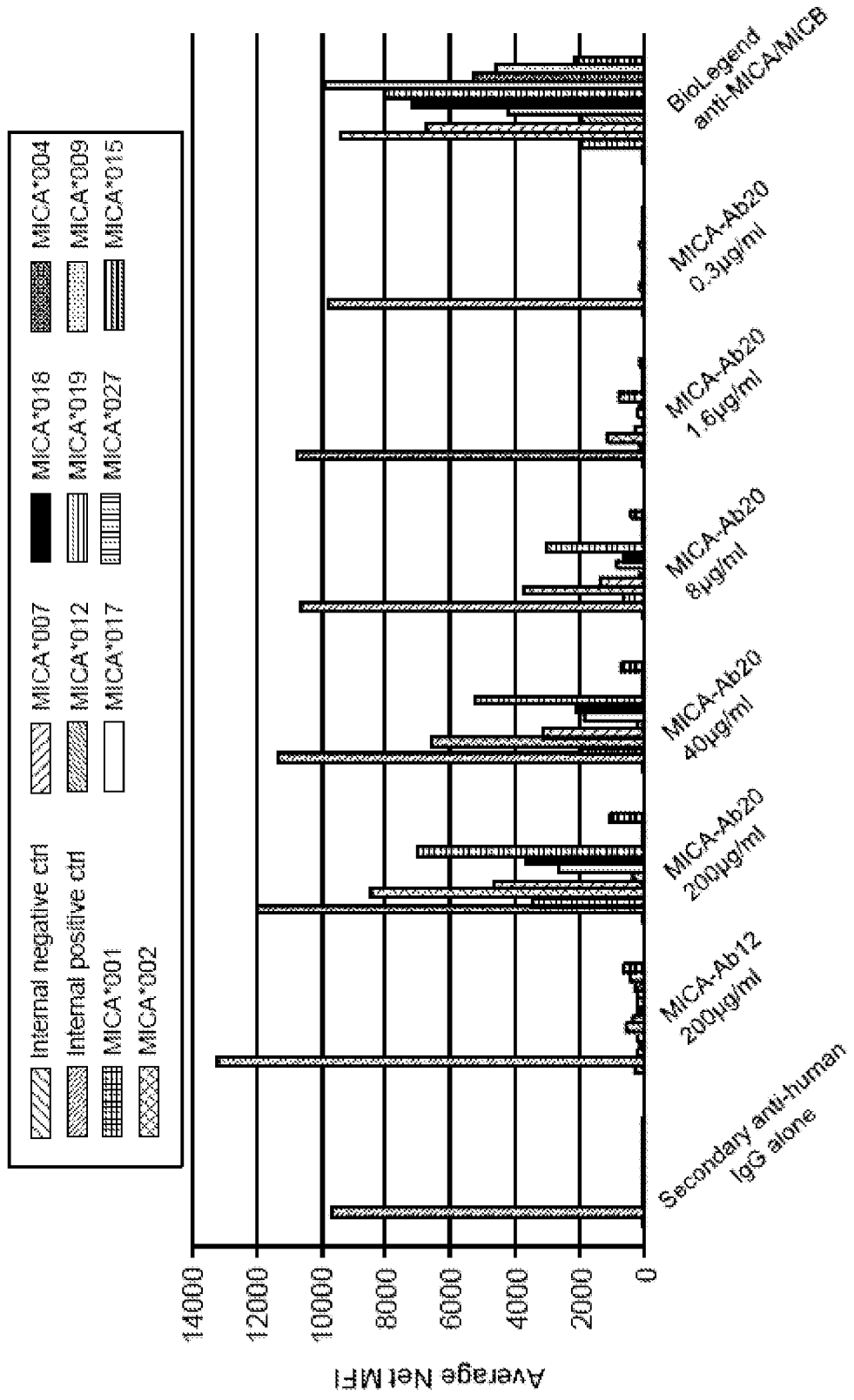

Internal negative ctrl
Internal positive ctrl
MICA*001
MICA*002
MICA*007
MICA*012
MICA*017
MICA*018
MICA*019
MICA*027
MICA*004
MICA*009
MICA*015
Average Net MFI
14000
12000
10000
8000
6000
4000
2000
0
Secondary anti-human IgG alone
MICA-Ab12 200µg/ml
MICA-Ab20 200µg/ml
MICA-Ab20 40µg/ml
MICA-Ab20 8µg/ml
MICA-Ab20 1.6µg/ml
MICA-Ab20 0.3µg/ml
BioLegend anti-MICA/MICB

FIG. 8

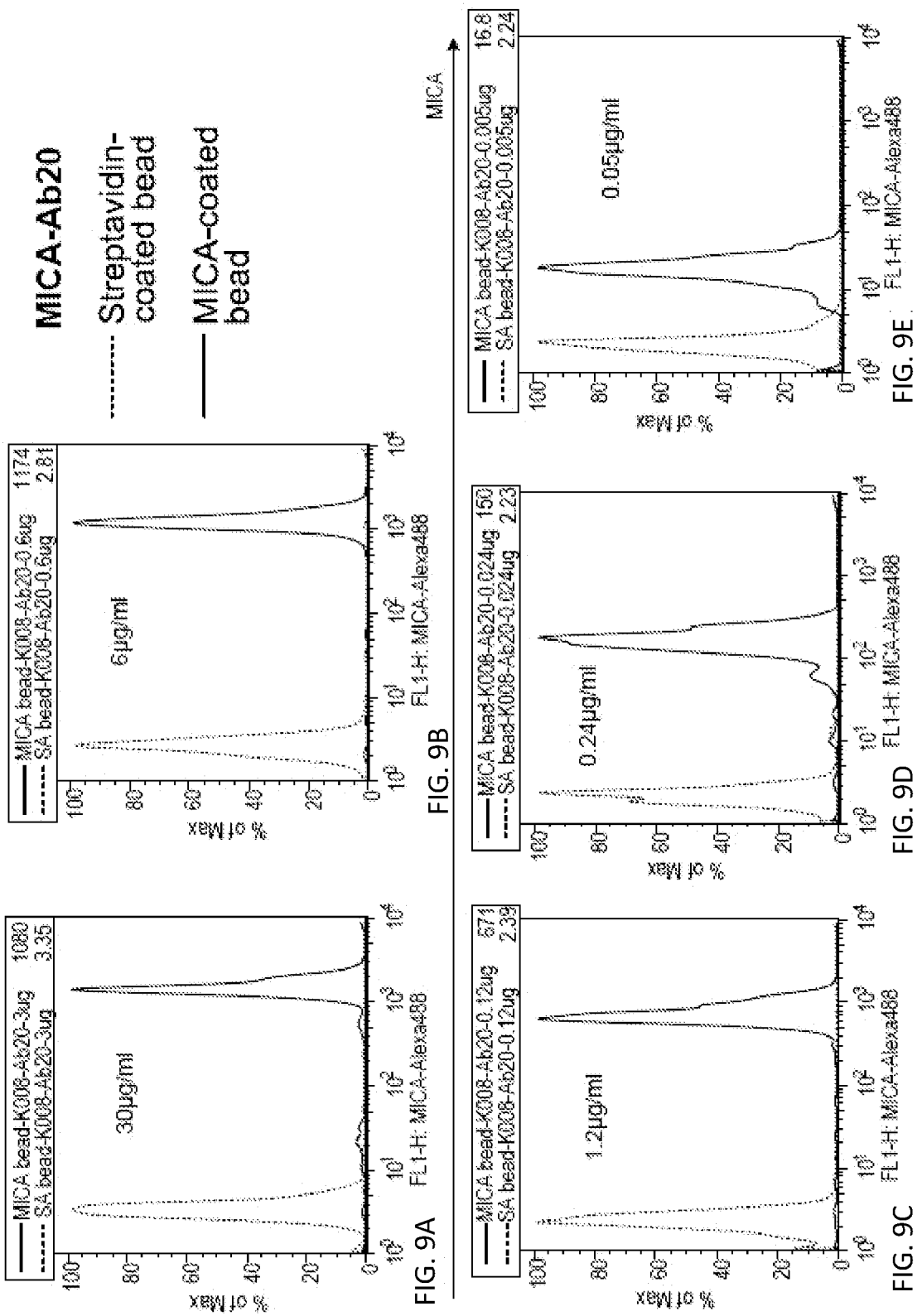


FIG. 9A FIG. 9B FIG. 9C FIG. 9D FIG. 9E

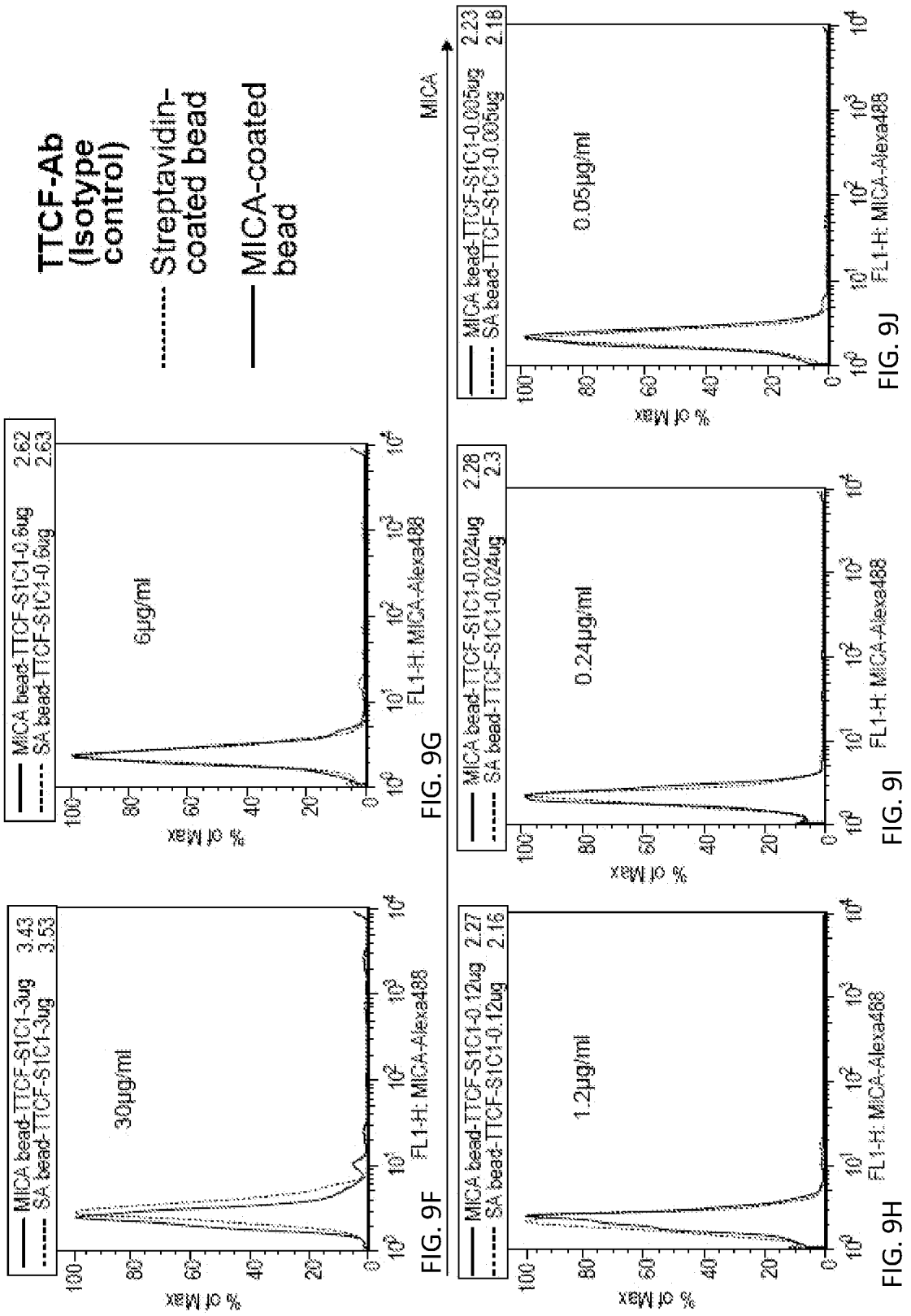


FIG. 9F FIG. 9G FIG. 9H FIG. 9I FIG. 9J

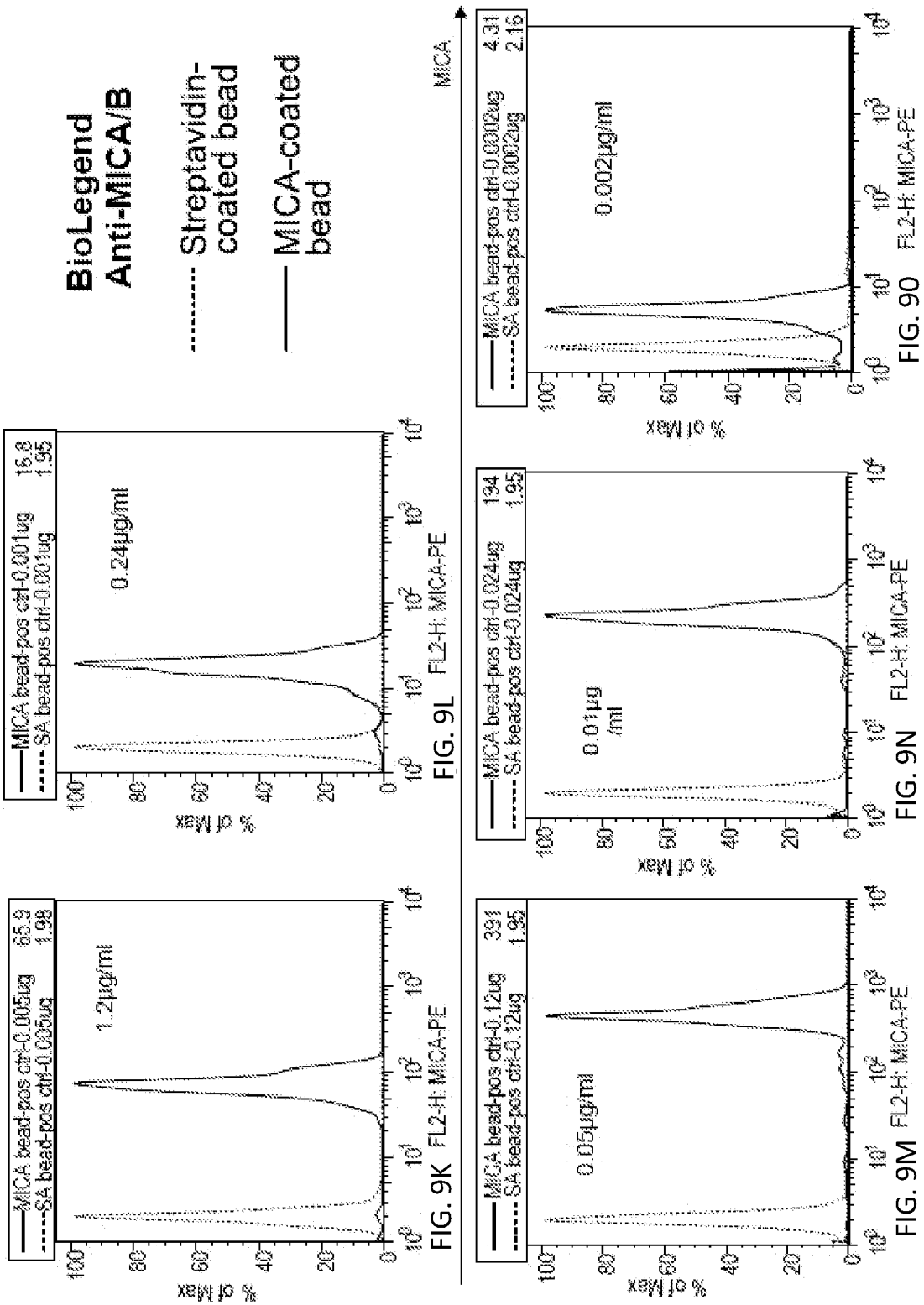


FIG. 9K FIG. 9L FIG. 9M FIG. 9N FIG. 90

CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGGAGCCTTCGGGGACCCTGTCCCT
CACCTGCACTGTGTCTGGTGGCTCCATCAGCAGGAGTAACTGGTGGAGTTGGGTCCGCC
AGCCCCCAGGGGAGGGGCTGGAATGGATTGGAGAAATCCATCACATTGGGAGGTCCAGC
TACAATCCGTCCCTCAAGAGTCGAGTCACCATGTCTGTAGACAAGTCCCAGAACCAGTT
CTCCCTGAGGCTGACCTCTGTGACCGCCGCGGACACGGCCGTGTATTACTGTGCGAAAA
ATGGCTACTACGCTATGGACGTCTGGGGCCAAGGGACCACGGTCACCGTCTCCTCG
(SEQ ID NO. 76)

FIG. 10

QVQLQESGPGLVEPSGTLSLTCTVSGGSISRSNWWSWVRQPPGEGLEWIGEIHHIGRSS
YNPSLKSRVTMSVDKSQNQFSLRLTSVTAADTAVYYCAKNGYYAMDVWGQGTTVTVSS
(SEQ ID NO. 77)

FIG. 11

GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCAC
CCTCTCCTGCAGGGCCAGTCAGAGTGTTAGCAGCGACTTCCTAGCCTGGTACCAGCAGA
AACCTGGCCAGGCTCCCAGGCTCCTCATCTAGGCTACATCCTTCAGGGCCACTGGCATC
TCAGACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCTCTCTCACCATCAACAGACT
GGAACCTGAAGATTTTGCAGTGTATTACTGTCAGCACTATCGTAGTTCACCTCCGTGGT
ACACTTTTGCCCAGGGGACCAAGCTGGACATGAGACGTACGGTGGCTGCACCATCTGTC
(SEQ ID NO. 78)

FIG. 12

EIVLTQSPGTLSLSPGERATLSCRASQSVSSDFLAWYQQKPGQAPRLLIYATSFRATGI
SDRFSGSGSGTDFSLTINRLEPEDFAVYYCQHYRSSPPWYTFAQGTKLDMRRTVAAPSV
(SEQ ID NO. 79)

FIG. 13

CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTGGTGAAGCCTTCGGGGACCCTGTCCCTC
ACCTGCGCTGTCTCT GGTGCCTCCATTACCAATGGT GCCTGGTGGAGTTGGGTCCGCCAG
CCCCCAGGGAAGGGGCTGGAGTGGATTGGAGAA ATCTATCTTAATGGGAACACC AACTCC
AACCCGTCCCTGAAGAGTCGAGTCATCATATCAGTGGACAAGTCCAAGAACCACTTCTCG
CTGACCCTGAACTCTGTGACCGCCGCGGACACGGCCGTGTATTAC TGTGCGAAGAACGCT
GCCTACAACCTTGAGTTCTGG GGCCAGGGAGCCCTGGTCACCGTCTCCTCA (SEQ ID NO:
95)

FIG. 14

QVQLQESGPGLVKPSGTLSLTCAVS GASITNGAW WSWVRQPPGKGLEWIGE IYLNGNT NS
NPSLKSRVIISVDKSKNHFSLTLNSVTA ADTAVYY CAKNAAYNLEFW GQGALVTVSS (SEQ
ID NO:96)

FIG. 15

GAAATTGTGTTGACGCAGTCTCCAGGCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACC
CTCTCCTGCAGGGCCAGTCAGACTGTTAGCAGCCCCTAC GTAGCCTGGTACCAGCAGAAA
CGTGGCCAGGCTCCCAGGCTCCTCATCTA TGGTGCATCC ACCAGGGCCACCGGCATCCCAG
ACAGGTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGACTGGAGC
CTGAAGATTTTGCAGTGTATTAC TGTCAGCAGTATGATAGATCATACTATTACACTTT T
GGCCAGGGGACCAAGCTGGAGATCAAA (SEQ ID NO:97)

FIG. 16

EIVLTQSPGTLSLSPGERATLSCRAS QTVSSPYVAWYQQKRGQAPRLLIY GAS TRATGIPDR
FSGSGSGTDFTLTI SRLEPEDFAVYY CQQYDRSYYYTF GQGTKLEIK (SEQ ID NO: 98)

FIG. 17

CAGGTGCAGCTGCAGGAGTCGGGCCC AGGACTGGTGAAGCCTTCGGAGAACCTGTCGCTC
ACCTGCACTGTC TCTGATGCCTCCATGAGTGATTATCAC TGGAGCTGGATCCGGCAGGCC
GCCGGGAAGGGACTGGAGTGGATTGGGCGT ATGTACAGCACTGGGAGTCCC TACTACAA
ACCCTCCCTCAAAGGTCGGGTCACCATGTCAATAGACACGTCCAAGAACCAGTTCTCCCT
GAAGCTGGCCTCTGTGACCGCCGCAGACACGGCCATCTATTAT TGTGCGAGCGGACAACA
TATTGGTGGCTGGGTCCCCCCTGACTTCTGG GGCCAGGGAACCCTGGTCACCGTCTCCTC
A (SEQ ID NO: 112)

FIG. 18

QVQLQESGPGLVKPSENLSLT CTVSDASMSDYHWSWIRQAAGKGLEWIGR MYSTGSPYY
KPSLKGRVTMSIDTSKNQFSLKLASVTAADTAIYY CASGQHIGGWVPPDFWGQGTLVTVS
S (SEQ ID NO:113)

FIG. 19

GATATTGTGATGACCCAGACTCCACTCTCCTCACCTGTCACCCTTGGACAGCCGGCCTCCA
TCTCCTGCAGGTCTAGT GAAGGCCTCGTATATAGTGATGGAGACACCTAC TTGAGTTGGT
TTCACCAGAGGCCAGGCCAGCCTCCAAGACTCCTGATTTAT AAAATTTCT AACCGGTTCT
CTGGGGTCCCCGACAGATTCAGTGGCAGTGGGGCAGGCACAGATTTCACACTGAAAATCA
GCAGGGTGGAGGCTGAGGATGTCGGGGTTTATTAC TGCATGCAAGCTACACATTTTCCGT
GGACGTTCGGCCAGGGGACCAAAGTGGAAGTCAAACGT (SEQ ID NO: 114)

FIG. 20

DIVMTQTPLSSPVTLGQPASISCRSS EGLVYSDGDTYLSWFHQRPGQPPRLLIY KIS NRFSG
VPDRFSGSGAGTDFTLKISRVEAEDVGVYY CMQATHFPWTF GQGTKVEVKR (SEQ ID NO:
115)

FIG. 21

GAGGTGCAGCTGTTGGAGTCTGGGGGAGGCTTGG TACAGCCTGGGGGGTCCCTGAGACTC TCCTGTGCAGCCTCTGGATTCACCTTTAGTTCATATGGC TTGACCTGGATACGCCAGGCT CCGGGGAAGGGCCTGGAGTGGGTCTCAAGT ATCAGTGGCAGTGGCAATAACACA TACTA CGCAGACTCTGTGAAGGGCCGGTTCACCATCTCCAGAGACAAAGTCAAGAAGACACTATA TCTACAAATGGACAGCCTGACAGTCGGAGACACGGCCGTCTATTAC TGCTTAGGAGTCGG TCAGGGCCACGGAATTCCGGTCATCGTCTCCT CA (SEQ ID NO. 130)

FIG. 22

EVQLLESGGGLVQPGGSLRLSC AASGFTFSSYGLTWIRQAPGKGLEWVSS ISGSGNNTYYA DSVKGRFTISRDKVKKTLYLQMDSLTVGDTAVYY CLGVGQGHGIPVIVSS (SEQ ID NO. 131)

FIG. 23

GATATTGTGATGACCCAGACTCCACTCTCCTCACCTGTCACCCTTGGACAGCC GGCCTCCA
TCTCCTGCAGGTCTAGT CAGAGCCTCGTACACCGTGATGGAAACACCTAC TTGAGTTGGT
TTCTGCAGAGGCCAGGCCAGGCTCCAAGACTCCTAATTTAT CGGATTTCT AACCGGTTCT
CTGGGGTCCCAGACAGATTCAGTGGCAGTGGGGCAGGGACGGATTTCACACTGAAAATC
AGCAGGGTGGAAGCTGAGGATGTCGGCGTTTACTAC TGCATGCAAGCTACACAAATCCCC
AACACTTTT GGCCAGGGGACCAAGCTGGAGATCAAG (SEQ ID NO. 132)

FIG. 24

DVVMTQSPLSLPVTLGQPASISCRSS QSLVHSDGNTY LNWFHQRPGQSPRRLIY KVS KR
DSGVPDRFSGSGSGSDFT LKISRVEAEDVGIYY CMQGTHWPTF GQGTKVEIKRTVAA
(SEQ ID NO. 133)

FIG. 25

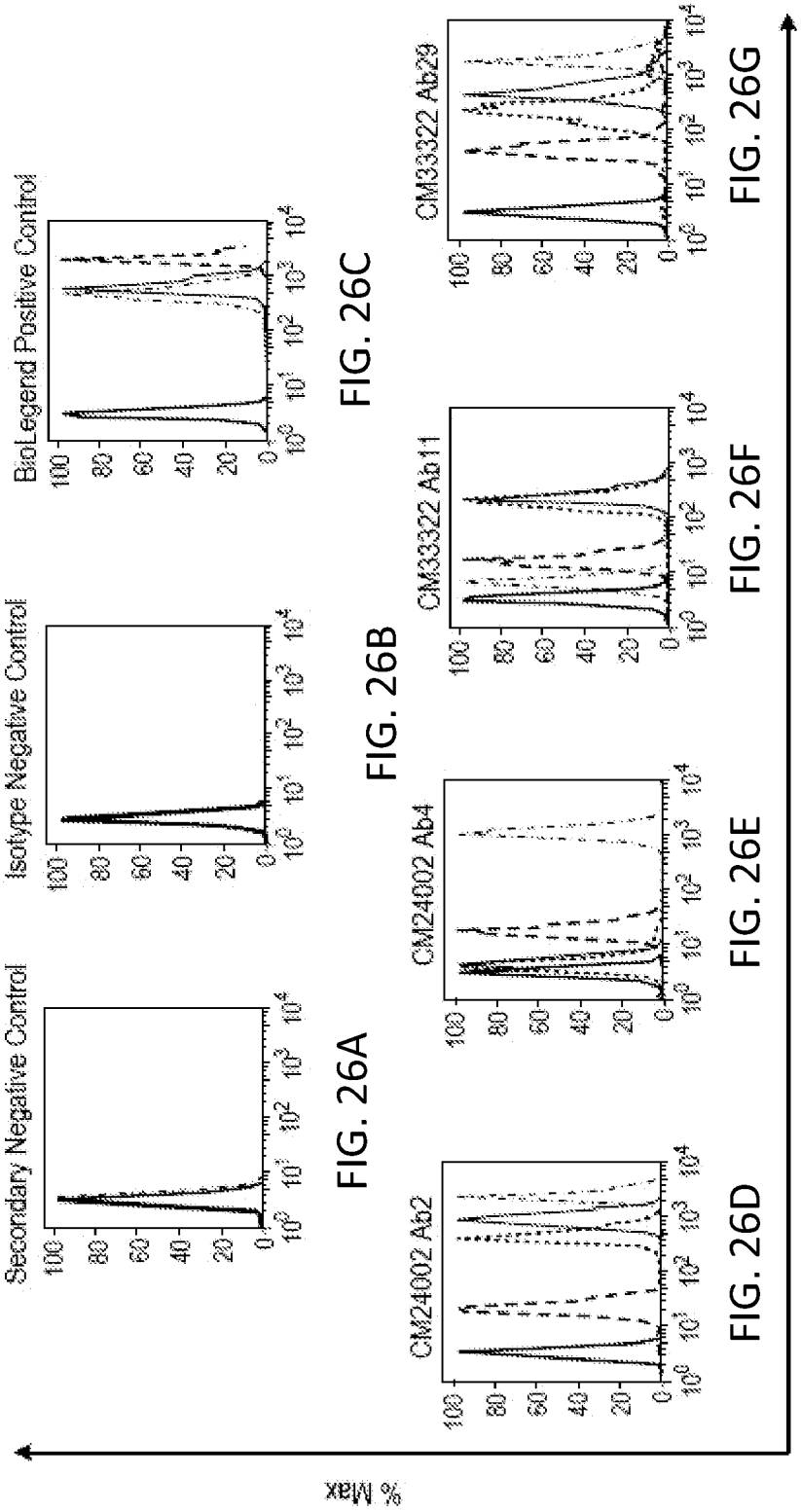


FIG. 26A

FIG. 26B

FIG. 26C

FIG. 26D

FIG. 26E

FIG. 26F

FIG. 26G

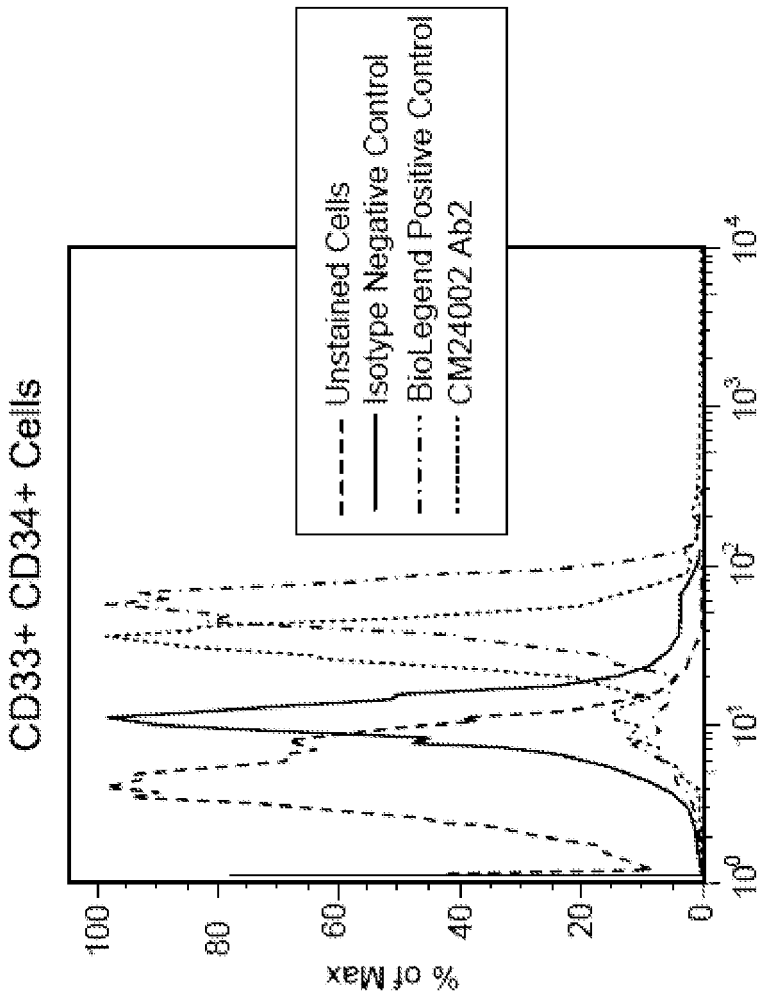

CD33+ CD34+ Cells
Unstained Cells
Isotype Negative Control
BioLegend Positive Control
CM24002 Ab2
% of Max
0
20
40
60
80
100
10^0
10^1
10^2
10^3
10^4
MICA-FITC

FIG. 27

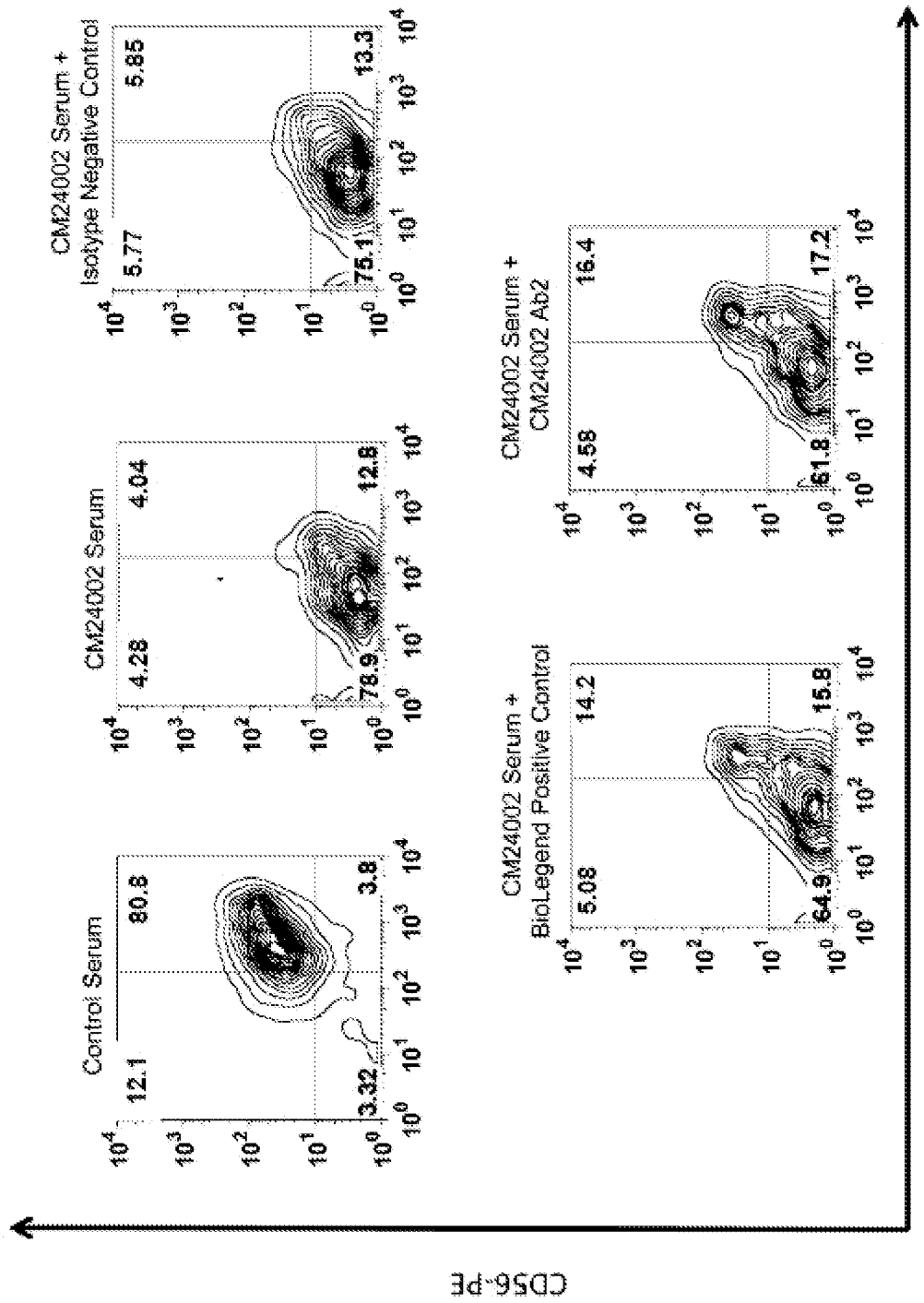

Control Serum
12.1
80.8
3.32
3.8
CM24002 Serum
4.28
4.04
78.9
12.8
CM24002 Serum +
Isotype Negative Control
5.77
5.85
75.1
13.3
CM24002 Serum +
BioLegend Positive Control
5.08
14.2
64.9
15.8
CM24002 Serum +
CM24002 Ab2
4.58
16.4
61.8
17.2
CD56-PE
NKG2D-APC

FIG. 28

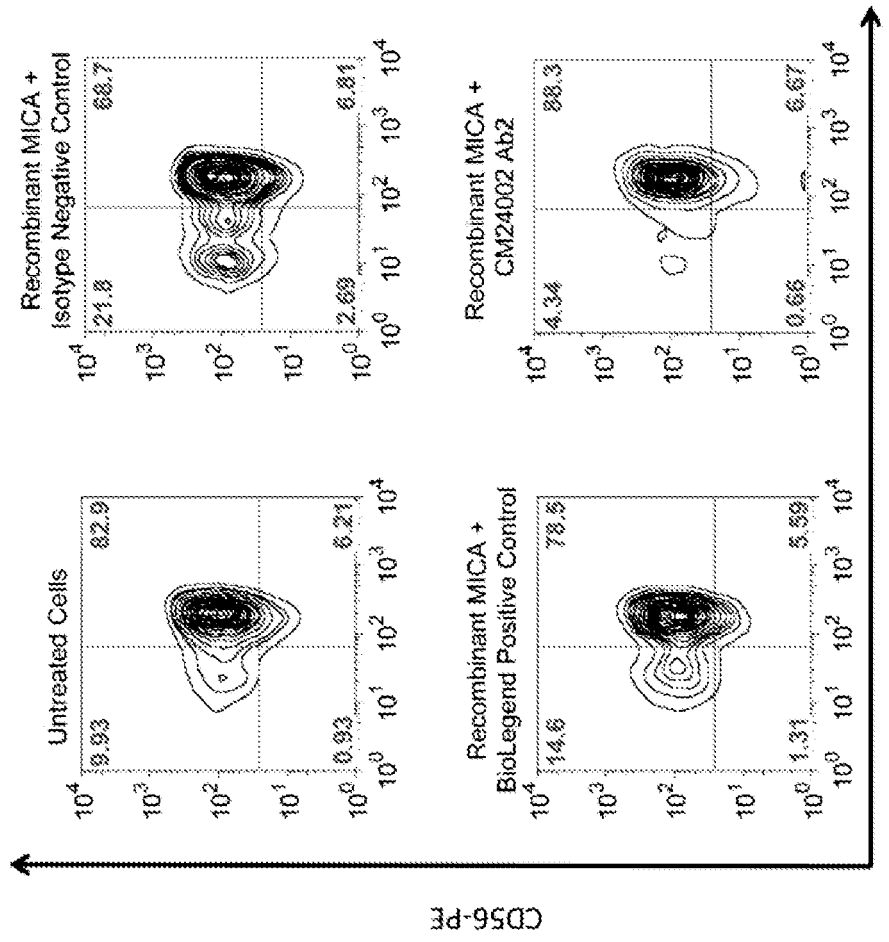

Untreated Cells
9.93
82.9
0.93
6.21
Recombinant MICA + BioLegend Positive Control
14.6
78.5
1.31
5.59
Recombinant MICA + Isotype Negative Control
21.8
68.7
2.69
6.81
Recombinant MICA + CM24002 Ab2
4.34
88.3
0.66
6.67
CD56-PE
NKG2D-APC

FIG. 29

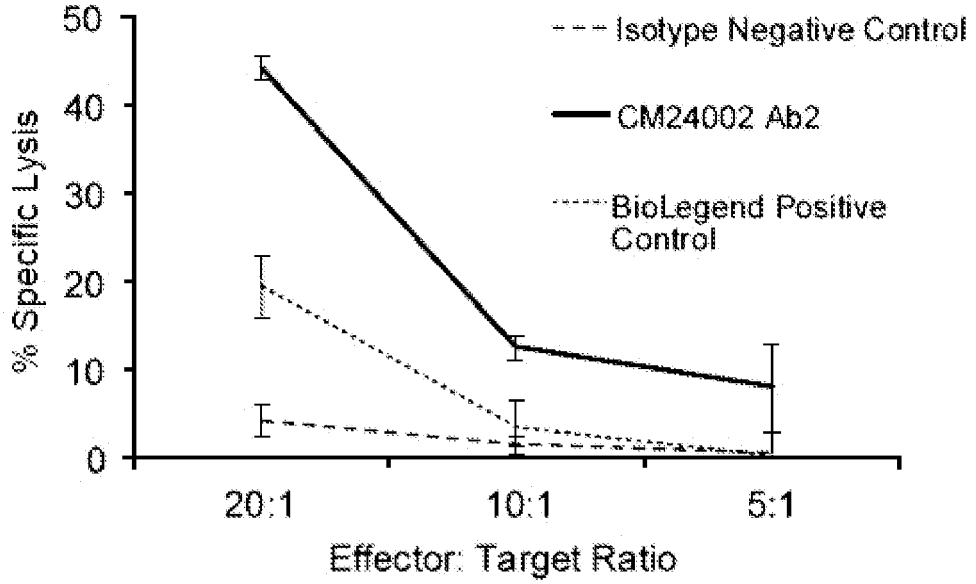

50
40
30
20
10
0
% Specific Lysis
Isotype Negative Control
CM24002 Ab2
BioLegend Positive Control
20:1
10:1
5:1
Effector: Target Ratio

FIG. 30

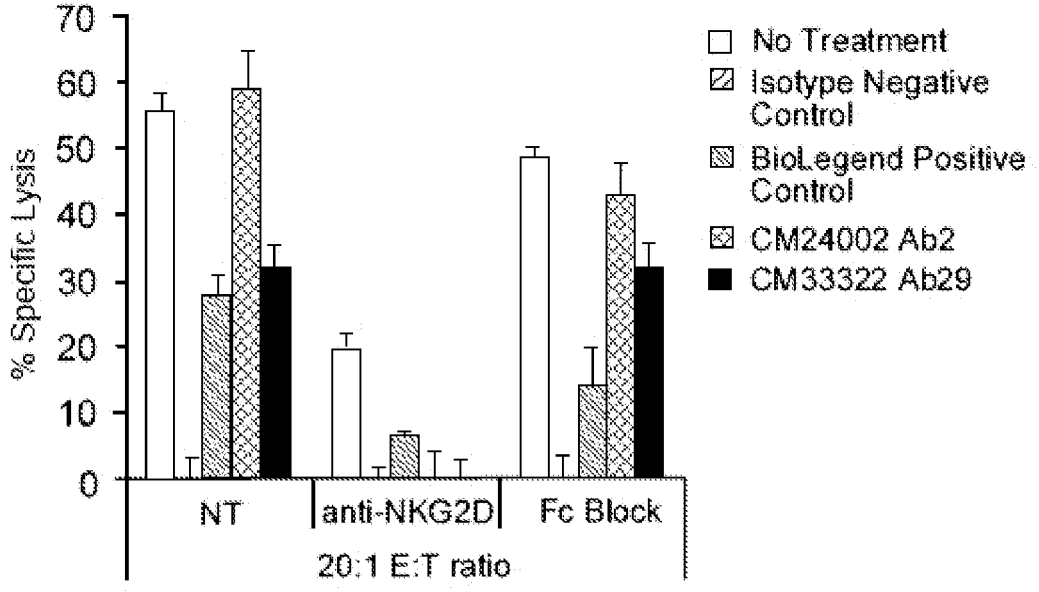

70
60
50
40
30
20
10
0
% Specific Lysis
No Treatment
Isotype Negative Control
BioLegend Positive Control
CM24002 Ab2
CM33322 Ab29
NT
anti-NKG2D
Fc Block
20:1 E:T ratio

FIG. 31

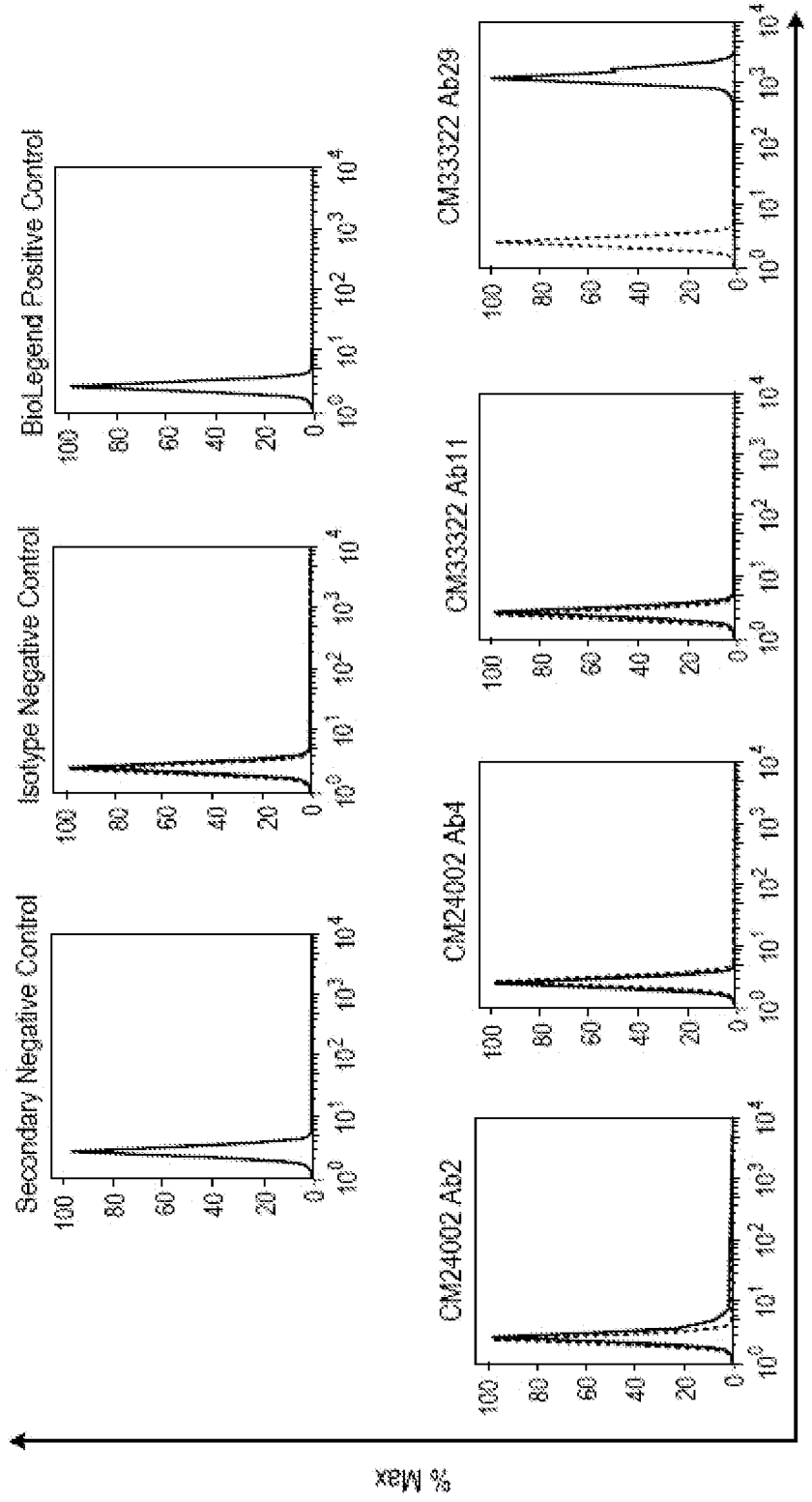

Secondary Negative Control
Isotype Negative Control
BioLegend Positive Control
CM24002 Ab2
CM24002 Ab4
CM33322 Ab11
CM33322 Ab29
% Max
MICA-α3 DOMAIN-FITC
Streptavidin Negative Control
MICA α3 Domain

FIG. 32

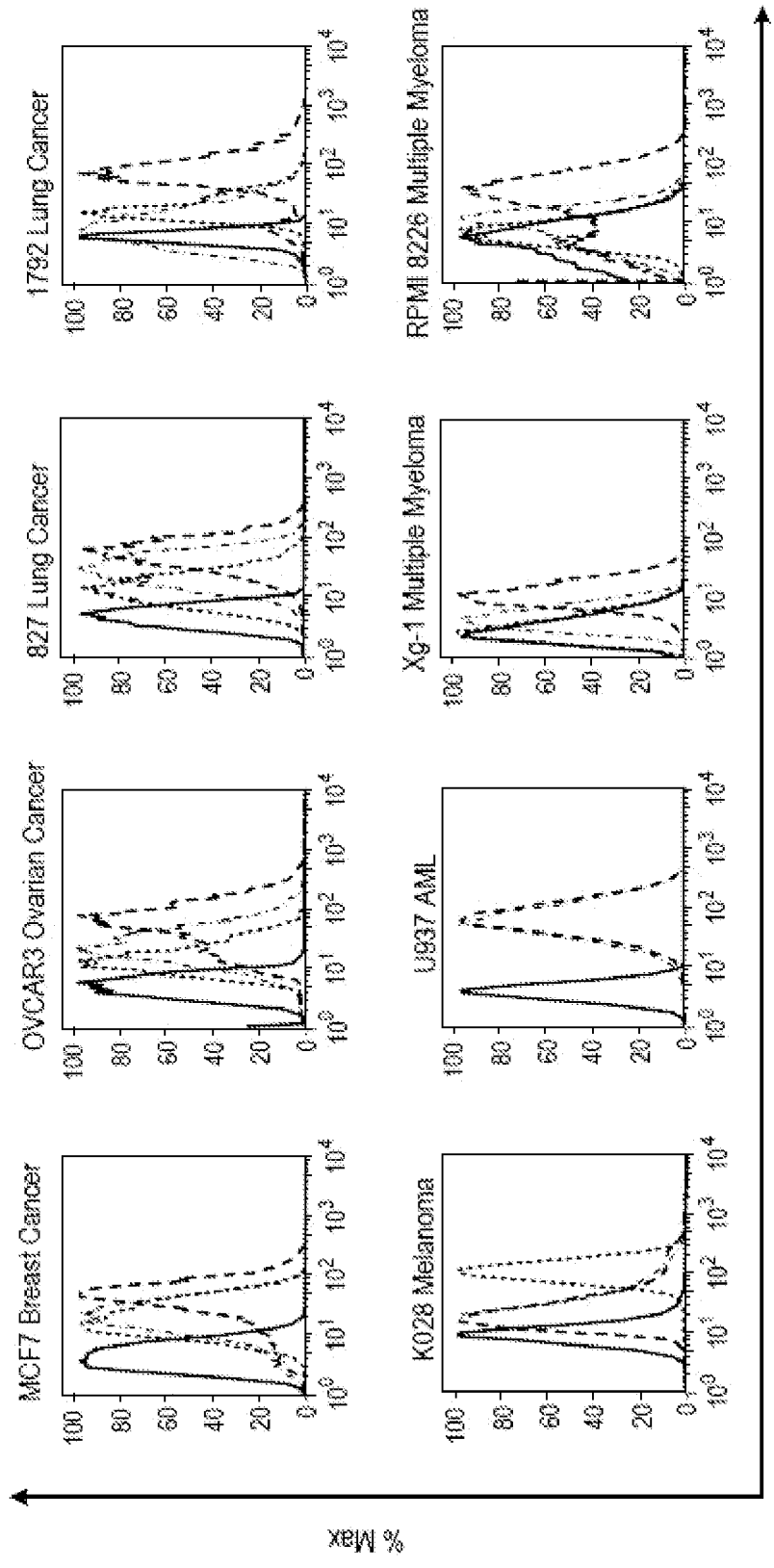

MCF7 Breast Cancer
CVCAR3 Ovarian Cancer
927 Lung Cancer
1792 Lung Cancer
K028 Melanoma
U937 AML
Xg-1 Multiple Myeloma
RPMI 8226 Multiple Myeloma
% Max
MICA-FITC
Unstained Cells
Isotype Negative Control
BioLegend Positive Control
CM24002 Ab2
CM33322 Ab29

FIG. 33

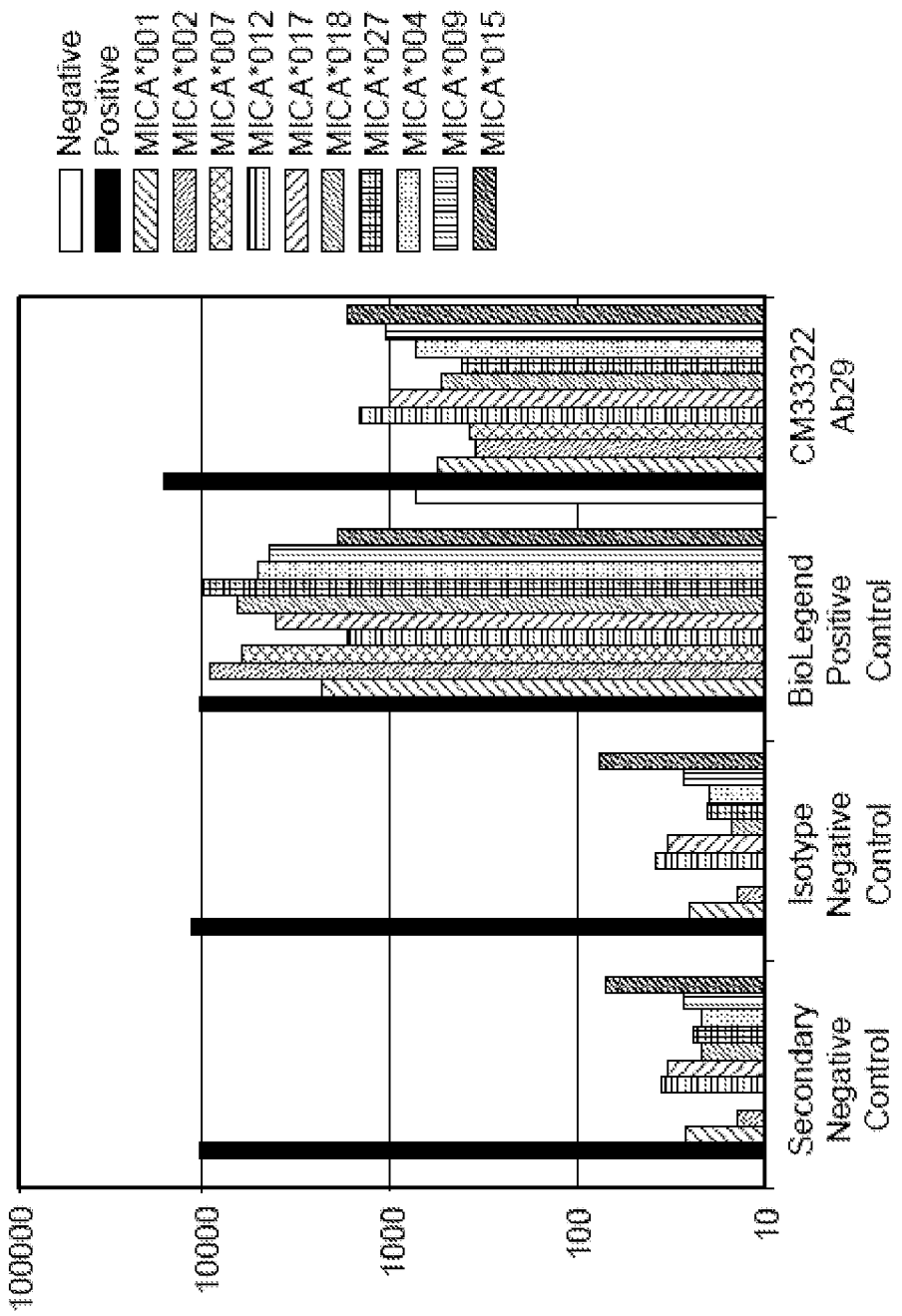

Negative
Positive
MICA*001
MICA*002
MICA*007
MICA*012
MICA*017
MICA*018
MICA*027
MICA*004
MICA*009
MICA*015
100000
10000
1000
100
10
Secondary Negative Control
Isotype Negative Control
BioLegend Positive Control
CM33322 Ab29

FIG. 34

FIG. 35

CAGGTGCAGCTGCAGGAGTCGGGCCCAGGACTG
GTGAGGCCTTCGGGGACCCTGTCCCTCACTTGCG
CTGTGTCTGGTGGCTCCATCGACTATAGTAATTGGT
GGGGTTGGGTCCGCCAAGTCCCAGGAAAGGGGC
TGGAGTGGATTGGCGAAGTCTATCATACTGGGGC
CACTCATTACAACCCGTCCCTCGAGCGTCGATGCA
TCATTTCAGTGGACAAGTCTAATAACCAGGTCTCC
CTCCAATTGACTTCTGTGACCGCCGCAGACTCGGC
CATCTATTATTGTGCGAGAGAGAGGGGCACGCATT
GTGATGGAAACCGCTGTTATTATGTTTTCTTTGACC
ATTGGGGCCAGGGAATCCCGGTCACCGTCTCCTC
A (SEQ ID NO:149)

FIG. 36

QVQLQESGPGLVRPSGTLSLTCAVSGGSIDYSNWW
GWVRQVPGKGLEWIGEVYHTGATHYNPSLERRCII
SVDKSNNQVSLQLTSVTAADSAIYYCARERGTHCDG
NRCYYVFFDHWGQGIPVTVSS (SEQ ID NO:150)

FIG. 37

GATATTGTGATGACCCAGACTCCACTGTCCTCACC
TGTCACCCTTGGACAACCGGCCTCCATCTCCTGCA
GGTCTAGTGAAAGCCTCGTACATTGGGATGGAAC
CACGTACTTGAGTTGGTTTCACCAGAGGCCAGGC
CAGCCTCCAAGACTCCTAATTTATAAGGTTTCTAAC
CGCTTCTCTGGGGTCCCAGACAGATTCAGTGGCA
GTGGGGCAGGGACAGATTTCACACTGAAAATCAG
CAGGGTGGAAGCTGACGATGTCGGCATTTATTATT
GCATGCAAGCTACACAGTTTCCTCGGACGTTCGG
CCAAGGGACGAAGGTGGAAATCAAACGTAC (SEQ
ID NO:151)

FIG. 38

DIVMTQTPLSSPVTLGQPASISCRSSESLVHWDGTT
YLSWFHQRPGQPPRLLIYKVSNRFSGVPDRFSGSG
AGTDFTLKISRVEADDVGIYYCMQATQFPRTFGQG
TKVEIKR (SEQ ID NO:152)

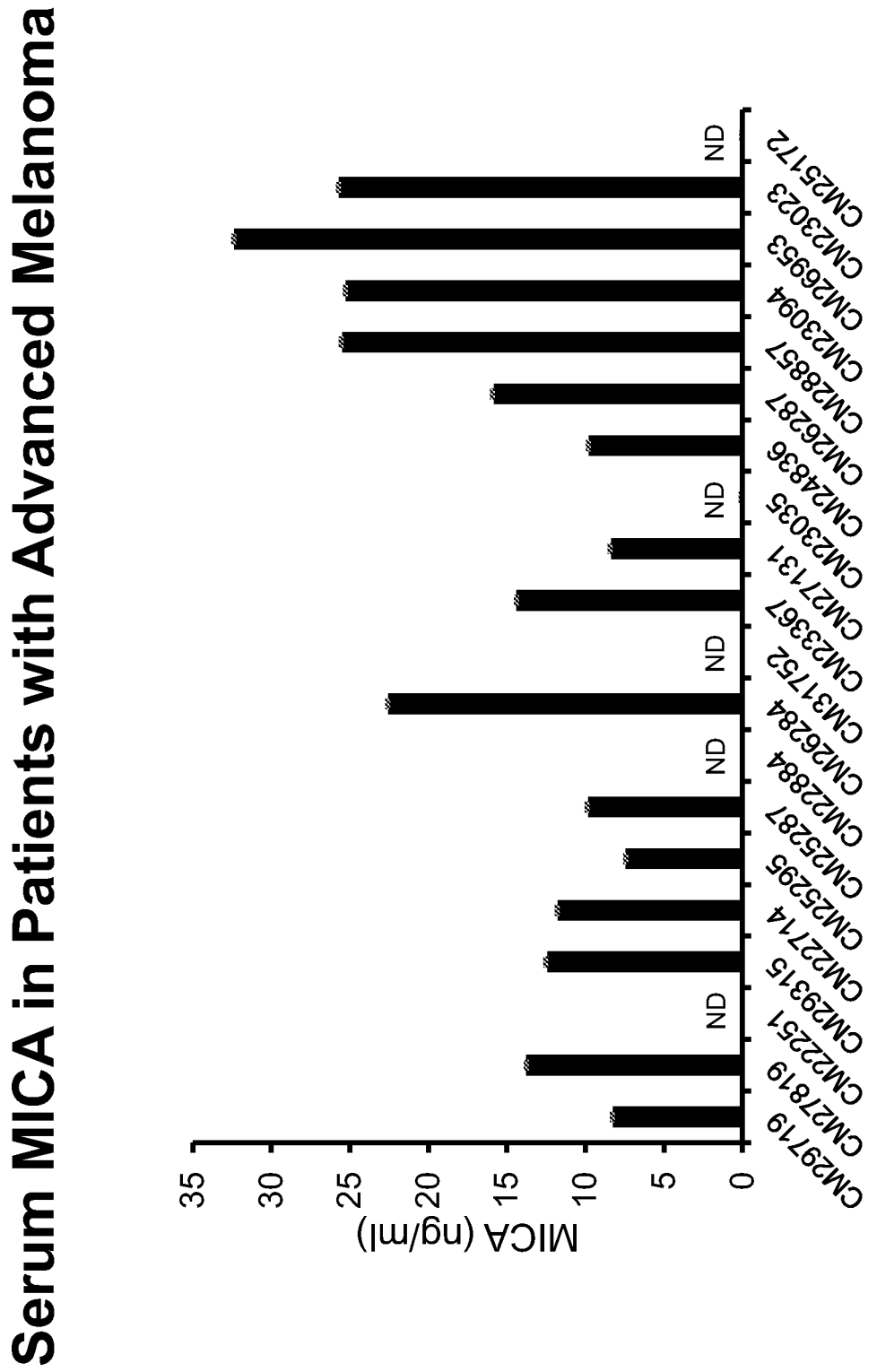

Serum MICA in Patients with Advanced Melanoma
MICA (ng/ml)
0
5
10
15
20
25
30
35
ND
ND
ND
ND
CM29719
CM27819
CM22251
CM29315
CM22714
CM25295
CM25287
CM22884
CM26284
CM31752
CM23367
CM27131
CM23035
CM24836
CM26287
CM28857
CM23094
CM26953
CM23023
CM25172

FIG. 39

FIG. 40

Patient #	Soluble MICA (ng/ml)	Control Serum	Melanoma Serum	Melanoma Serum + Isotype	Melanoma Serum + CM24002 Ab2	Melanoma Serum + CM33322 Ab29	Melanoma Serum + CM33322 Ab4
CM28857	25.49	63.2	41.8	39.8	**57.5**	62	53.3
CM26953	32.36	61.3	52.9	48.3	**62.1**	66	55.7
CM26284	22.54	76.4	50	50	62.5	71.4	63.6
CM23023	25.69	60.4	28.9	29.7	46.4	44.9	48.3
CM23094	25.27	72.8	50	48.4	**68.9**	75.4	64.2
CM29315	12.42	59.5	38.6	36.4	50	60	**54.3**
CM22714	11.76	62.7	51.5	49.1	**59.7**	**70.8**	71.1
CM23367	14.39	63.9	47.1	53.3	**67.9**	68.1	**67.7**
CM24836	9.8	69.8	54.5	58.1	**67.2**	75.6	**70.2**
CM27819	13.76	59.3	44.2	45.8	57	52.4	**56.9**
CM25287	9.84	60.8	46.7	47.2	63.3	**61**	**58.5**
CM25295	7.43	60.1	46.7	47.2	**60.1**	60.6	**58.8**
CM26287	15.84	67.6	56.7	51.7	74.3	**72.6**	**72.3**
CM27131	8.37	72.3	57.1	62.8	**73.2**	**75.4**	75.6
CM29719	8.25	64	53.4	56.7	68.9	**66.9**	**65.4**

FIG. 41

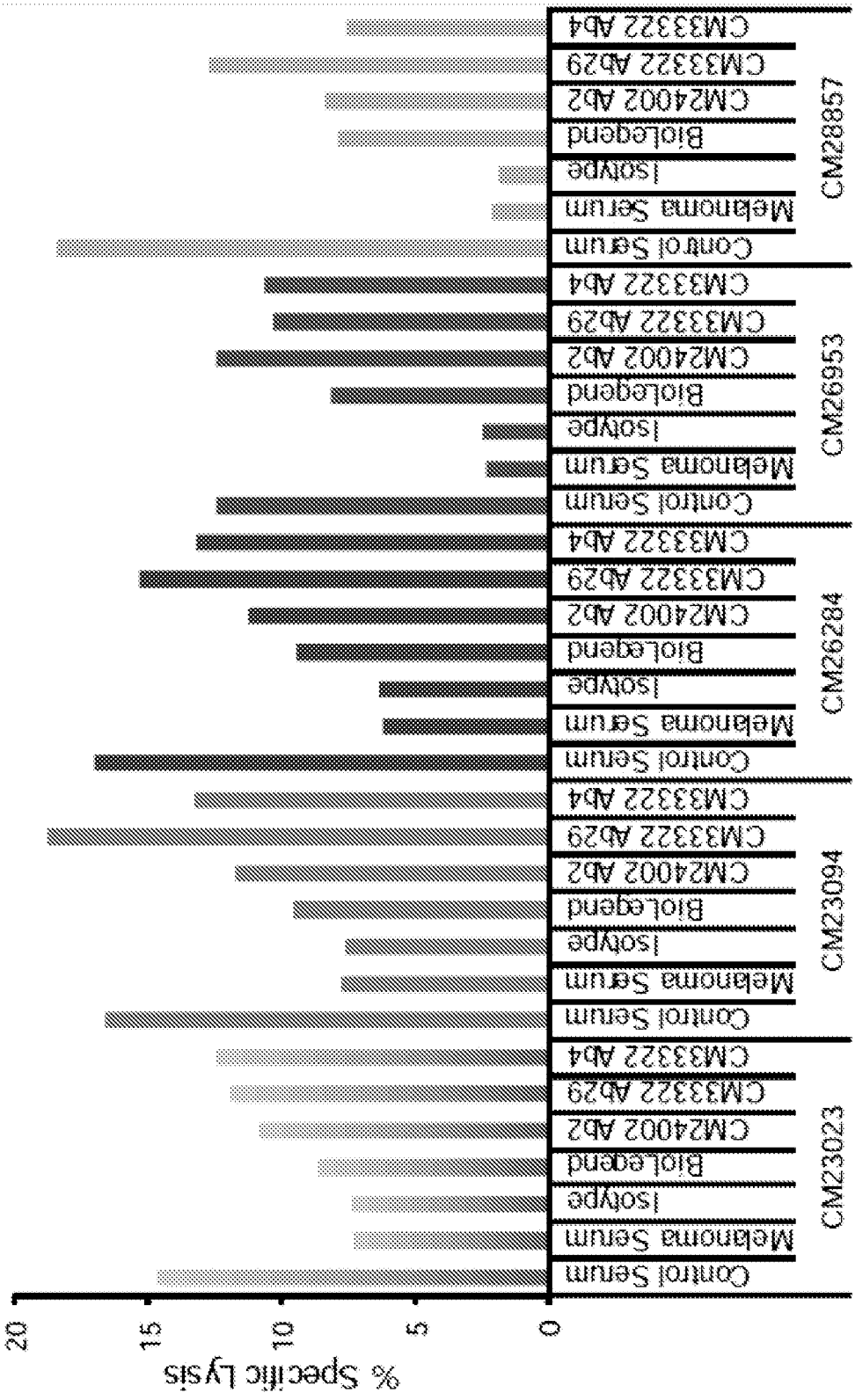

% Specific Lysis
0
5
10
15
20
CM23023
CM23094
CM26284
CM26953
CM28857
Control Serum
Melanoma Serum
Isotype
BioLegend
CM24002 Ab2
CM33322 Ab29
CM33322 Ab4

FIG. 42

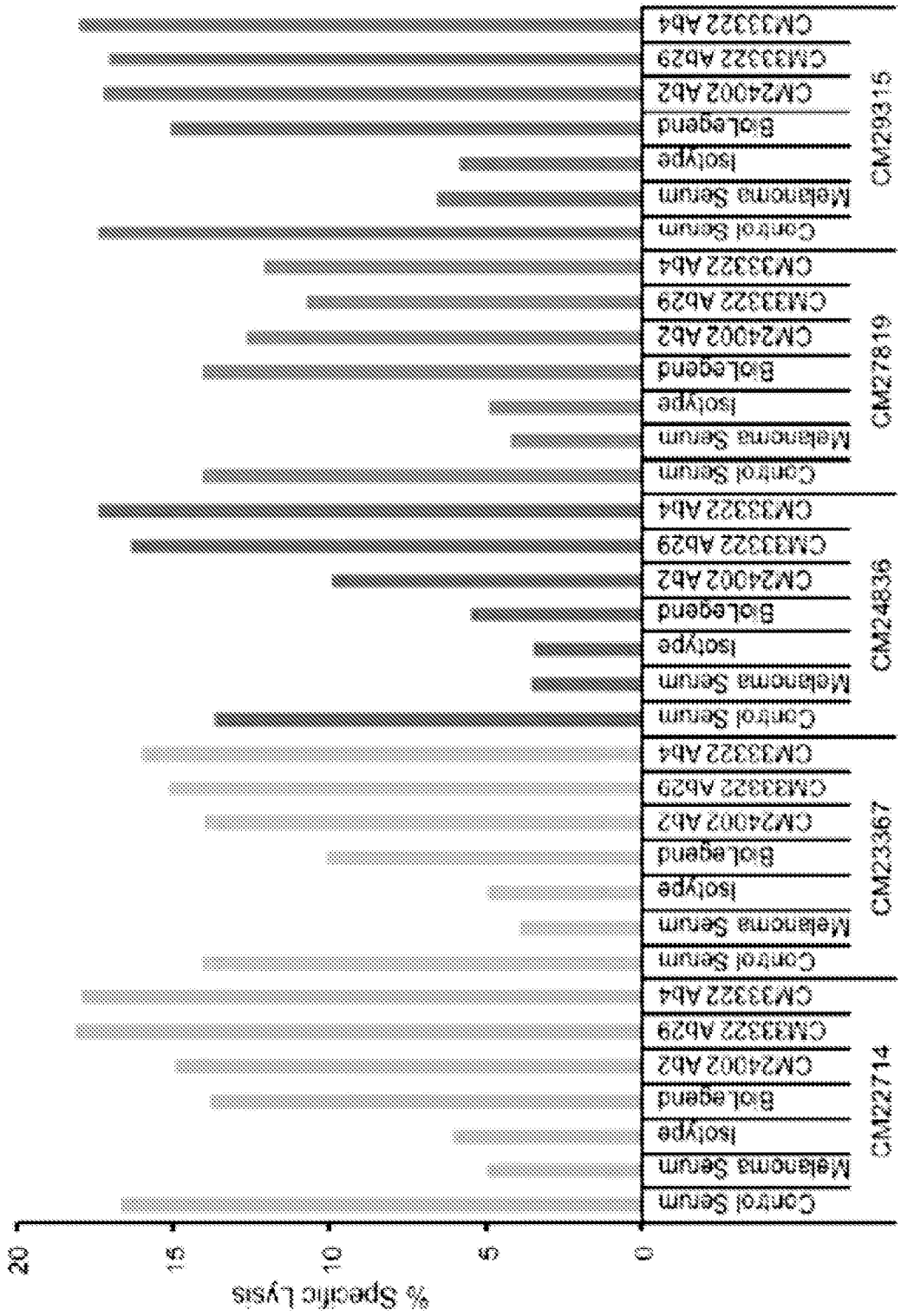

% Specific Lysis
0
5
10
15
20
CM22714
CM23367
CM24836
CM27819
CM29315
Control Serum
Melanoma Serum
Isotype
B-cLegend
CM2400Z Ab2
CM33322 Ab29
CM33322 Ab4

FIG. 43

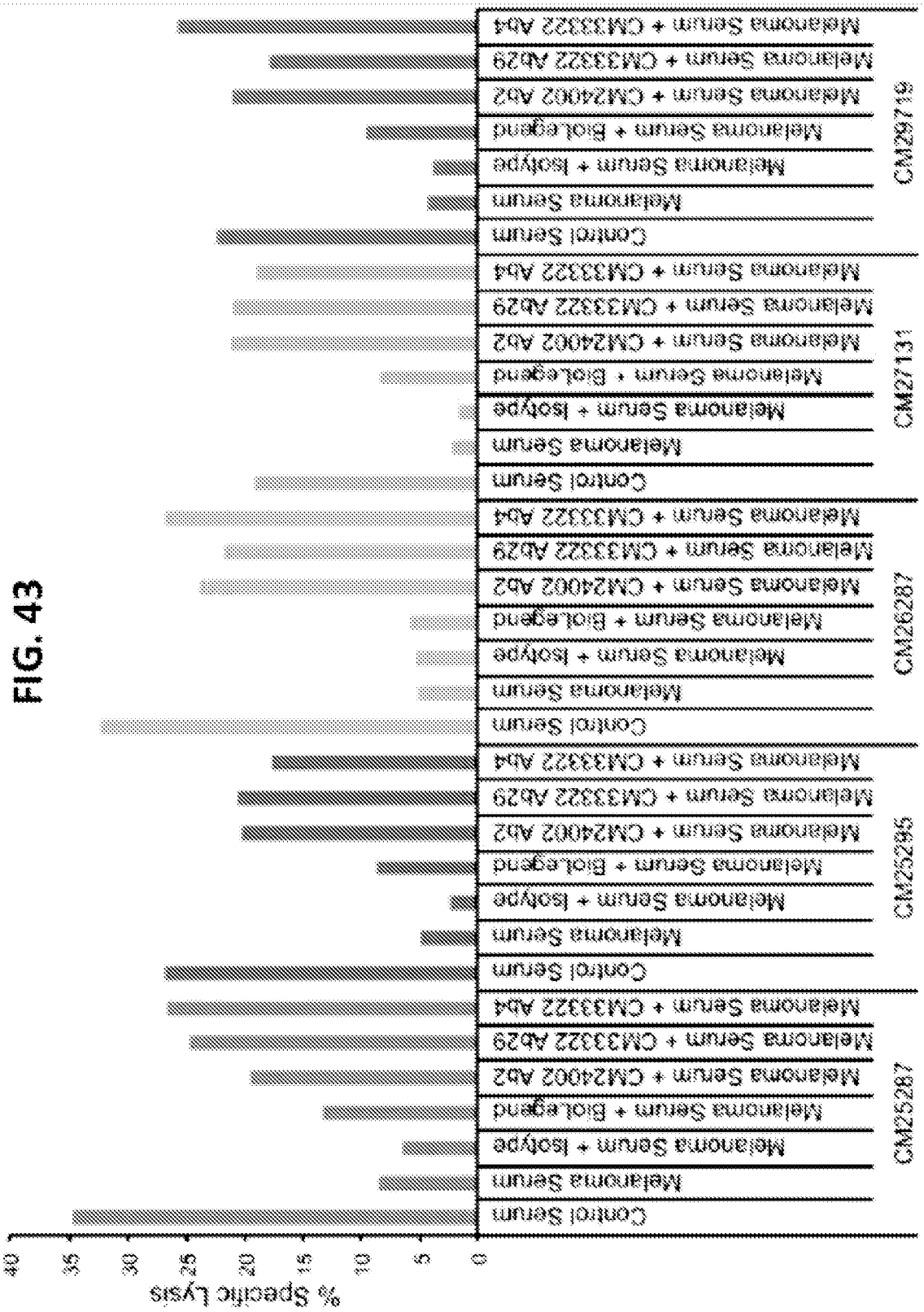
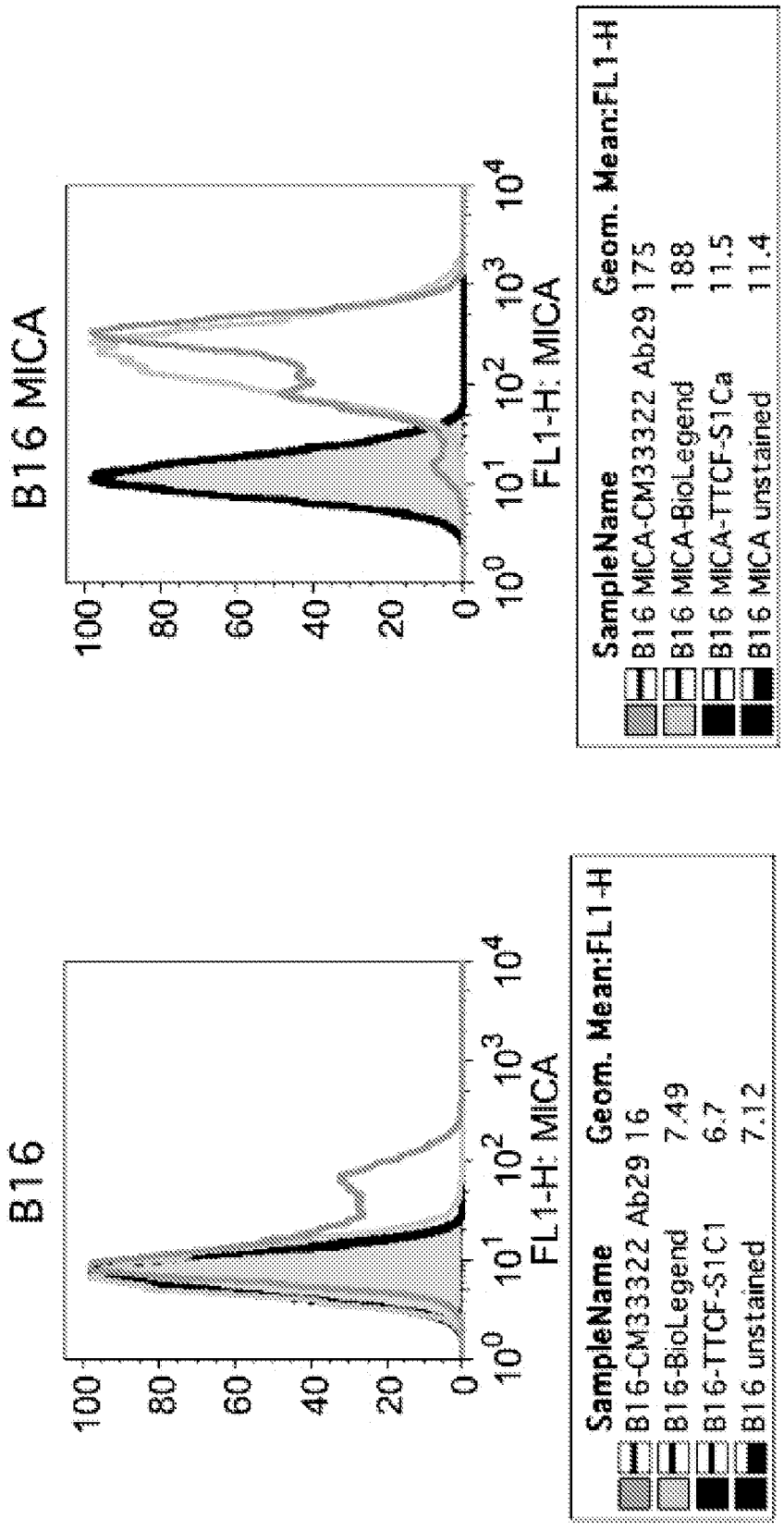

% Specific Lysis
40
35
30
25
20
15
10
5
0
Control Serum
Melanoma Serum
Melanoma Serum + Isotype
Melanoma Serum + Biolegend
Melanoma Serum + CM24002 Ab2
Melanoma Serum + CM33322 Ab29
Melanoma Serum + CM33322 Ab4
CM252287
Control Serum
Melanoma Serum
Melanoma Serum + Isotype
Melanoma Serum + Biolegend
Melanoma Serum + CM24002 Ab2
Melanoma Serum + CM33322 Ab29
Melanoma Serum + CM33322 Ab4
CM252295
Control Serum
Melanoma Serum
Melanoma Serum + Isotype
Melanoma Serum + Biolegend
Melanoma Serum + CM24002 Ab2
Melanoma Serum + CM33322 Ab29
Melanoma Serum + CM33322 Ab4
CM262287
Control Serum
Melanoma Serum
Melanoma Serum + Isotype
Melanoma Serum + Biolegend
Melanoma Serum + CM24002 Ab2
Melanoma Serum + CM33322 Ab29
Melanoma Serum + CM33322 Ab4
CM27131
Control Serum
Melanoma Serum
Melanoma Serum + Isotype
Melanoma Serum + Biolegend
Melanoma Serum + CM24002 Ab2
Melanoma Serum + CM33322 Ab29
Melanoma Serum + CM33322 Ab4
CM29719

FIG. 44


B16
B16 MICA
FL1-H: MICA
SampleName
Geom. Mean:FL1-H
B16-CM33322 Ab29 16
B16-BioLegend 7.49
B16-TTCF-S1C1 6.7
B16 unstained 7.12
B16 MICA-CM33322 Ab29 173
B16 MICA-BioLegend 188
B16 MICA-TTCF-S1Ca 11.5
B16 MICA unstained 11.4

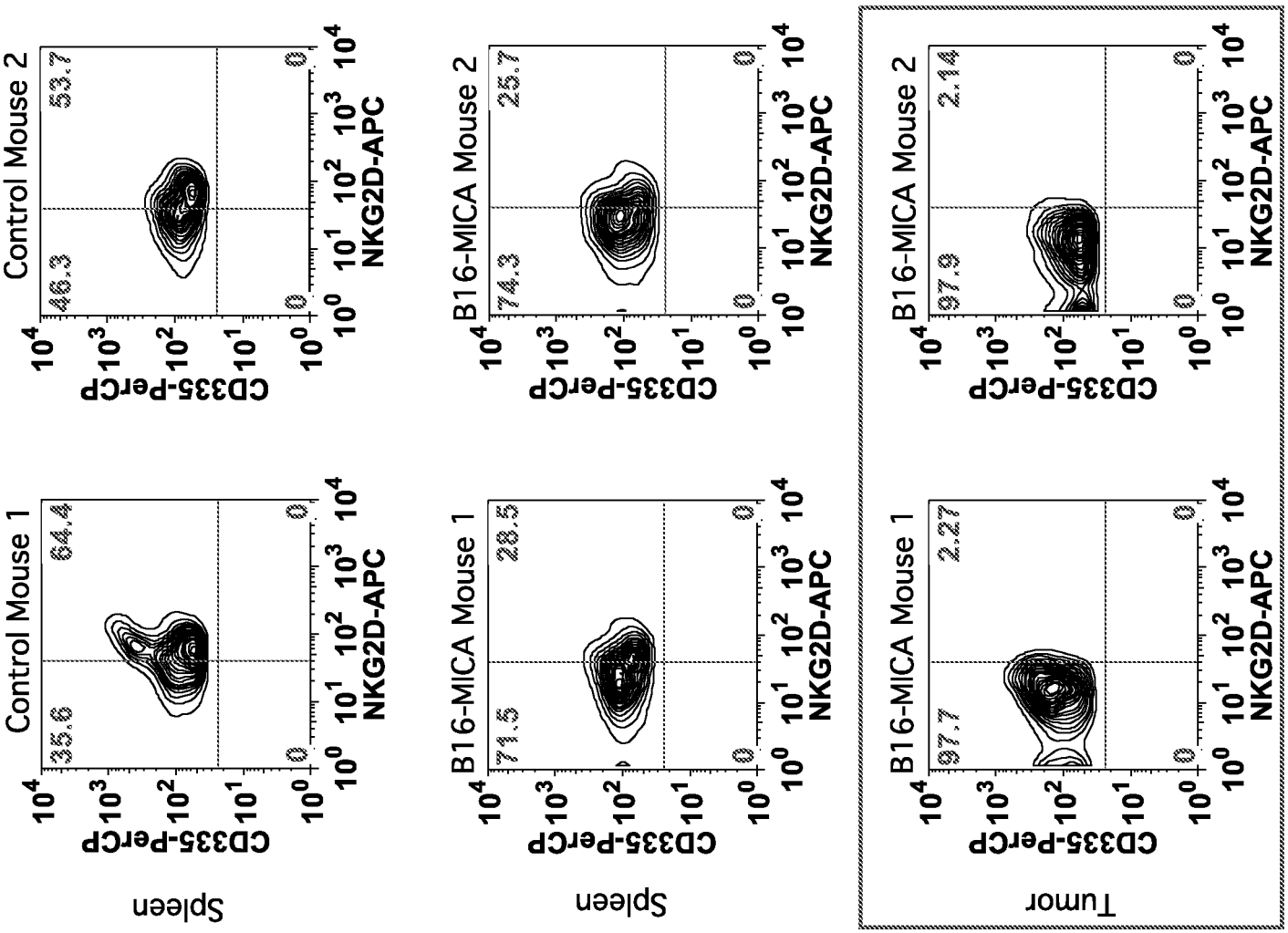

Control Mouse 2
Control Mouse 1
B16-MICA Mouse 2
B16-MICA Mouse 1
Spleen
Spleen
Tumor
CD335-PerCP
NKG2D-APC
46.3
53.7
35.6
64.4
74.3
25.7
71.5
28.5
97.9
2.14
97.7
2.27

FIG. 45

FIG. 46

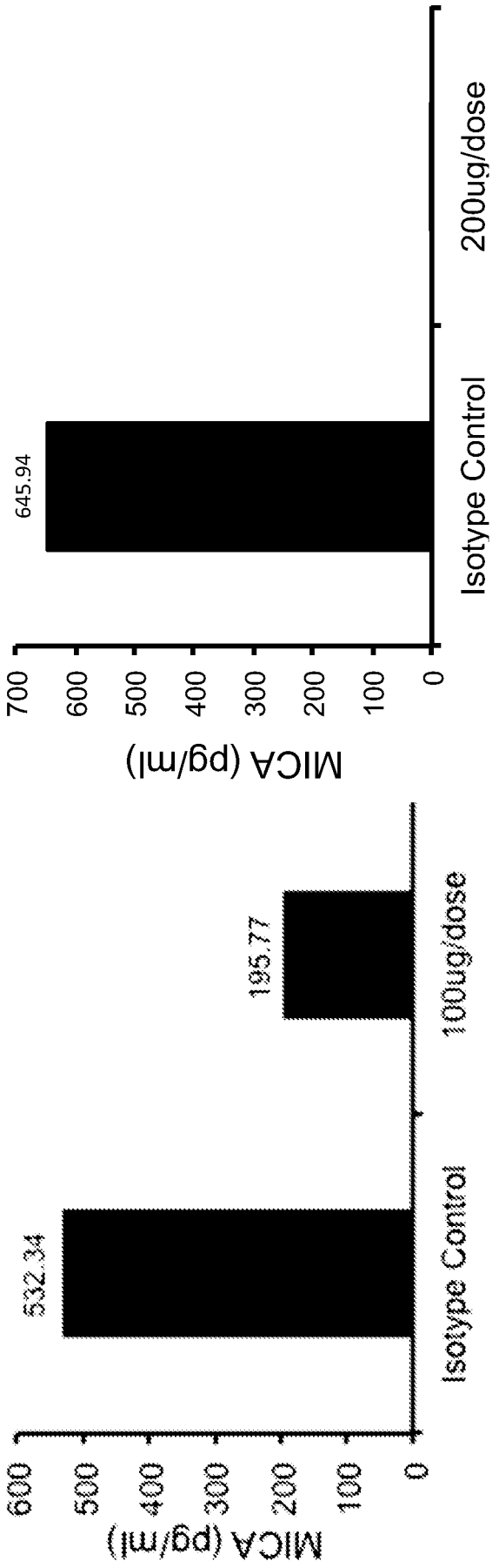

MICA (pg/ml)
600
500
400
300
200
100
0
532.34
195.77
Isotype Control
100ug/dose
MICA (pg/ml)
700
600
500
400
300
200
100
0
645.94
Isotype Control
200ug/dose

FIG. 47

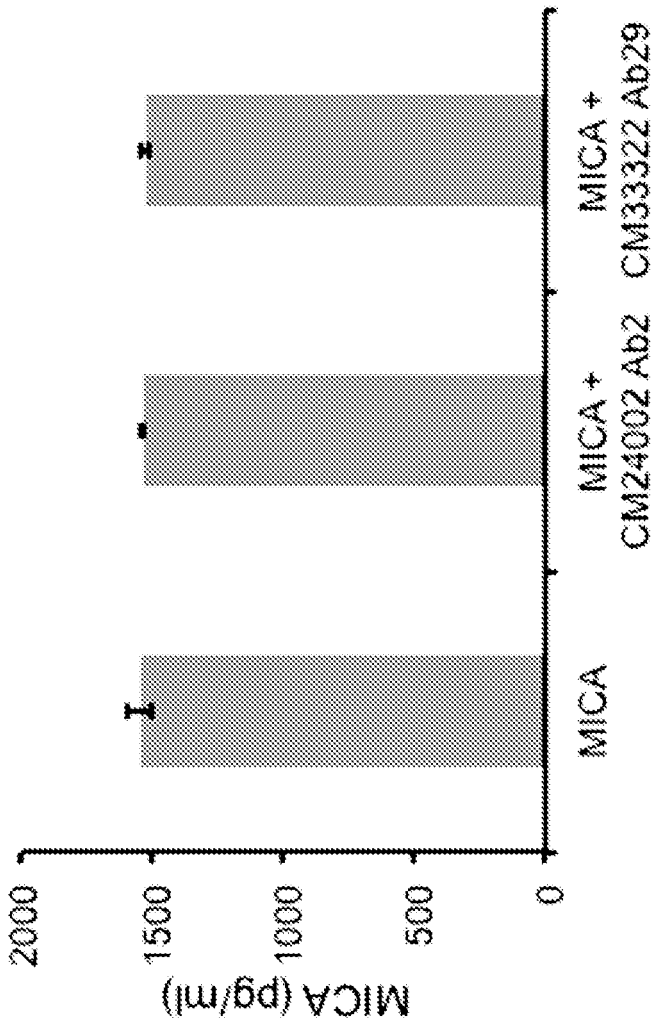

MICA (pg/ml)
2000
1500
1000
500
0
MICA
MICA + CM24002 Ab2
MICA + CM33322 Ab29

FIG. 48

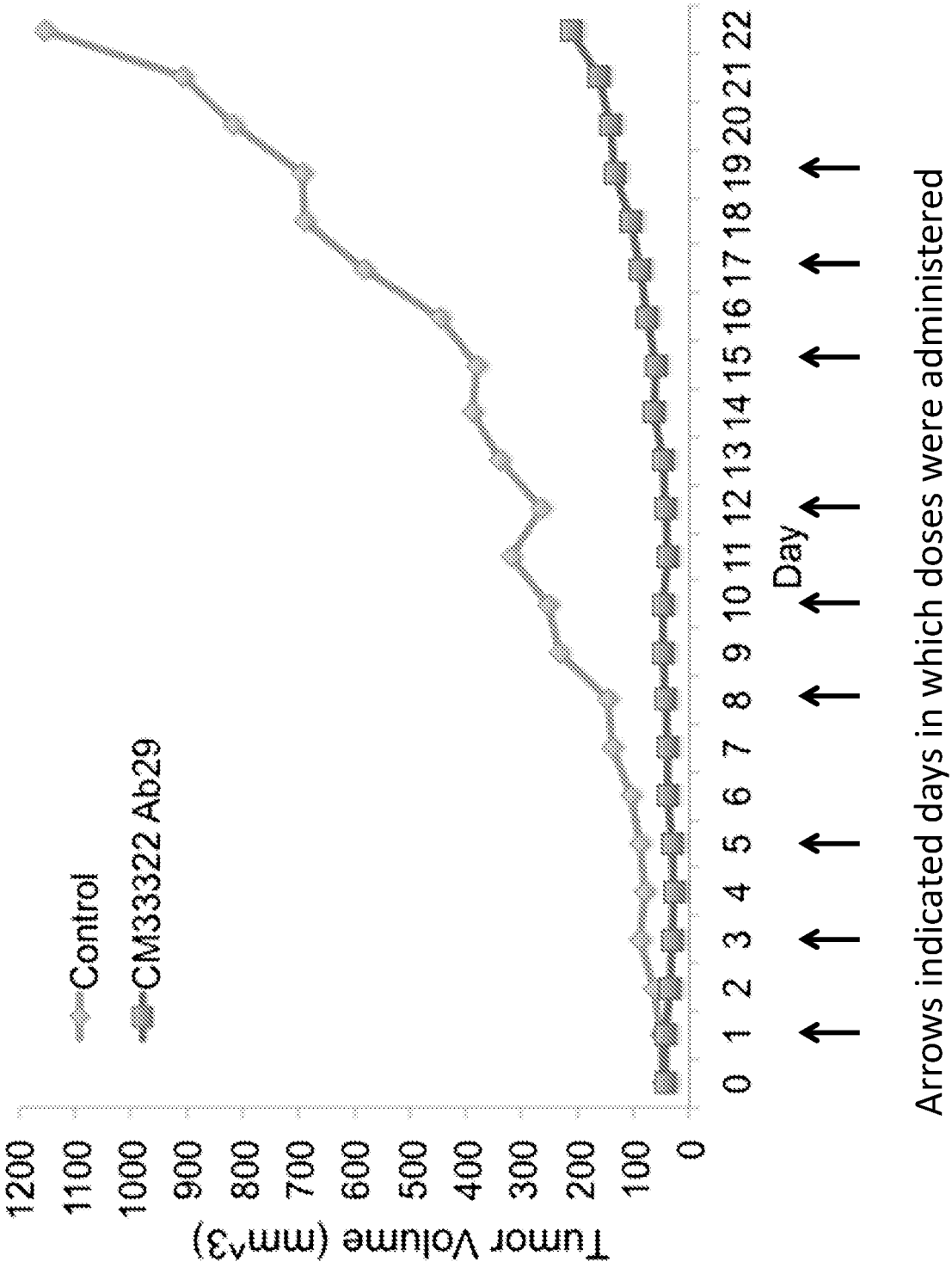
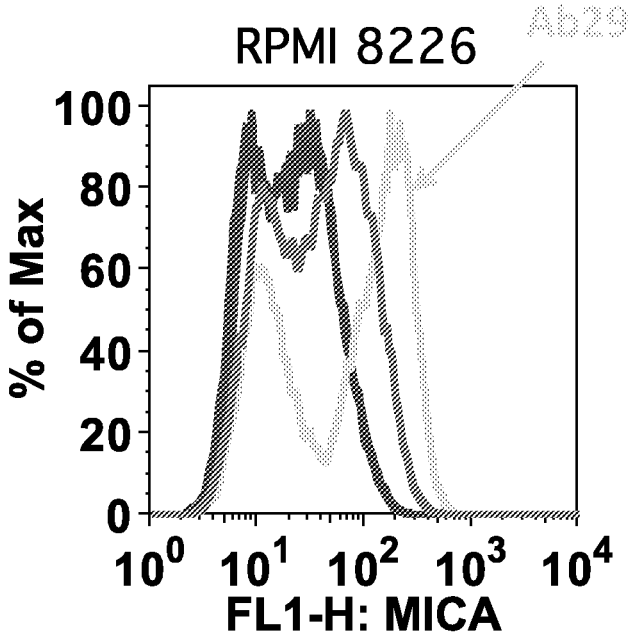
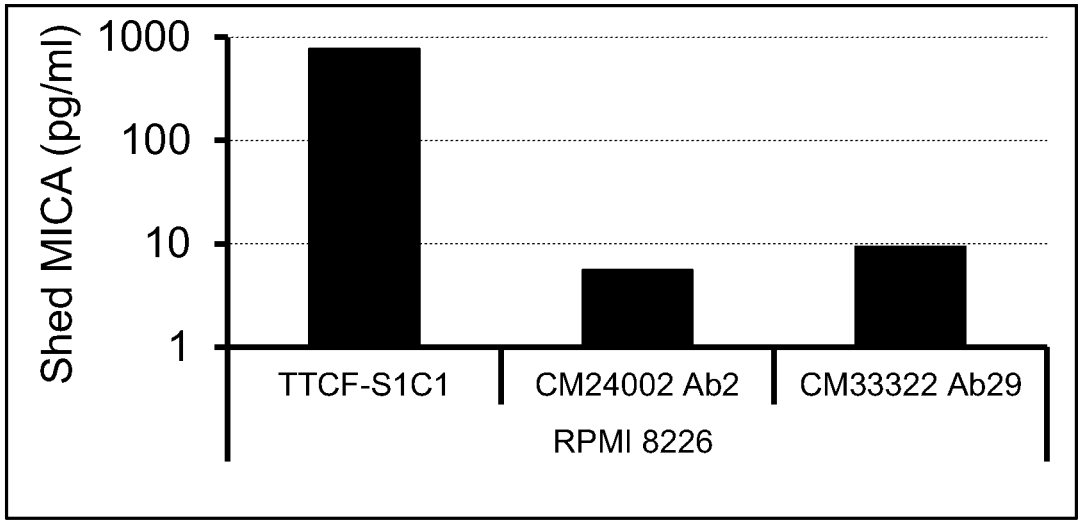

Control
CM33322 Ab29
Tumor Volume (mm^3)
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Day
Arrows indicated days in which doses were administered

FIG. 49





RPMI-8226 cells were cultured in the presence of 10ug/ml isotype control antibody, CM33322 Ab29, or CM24002 Ab2. After 48hrs, cells were washed, and MICA surface expression was determined by flow cytometry.

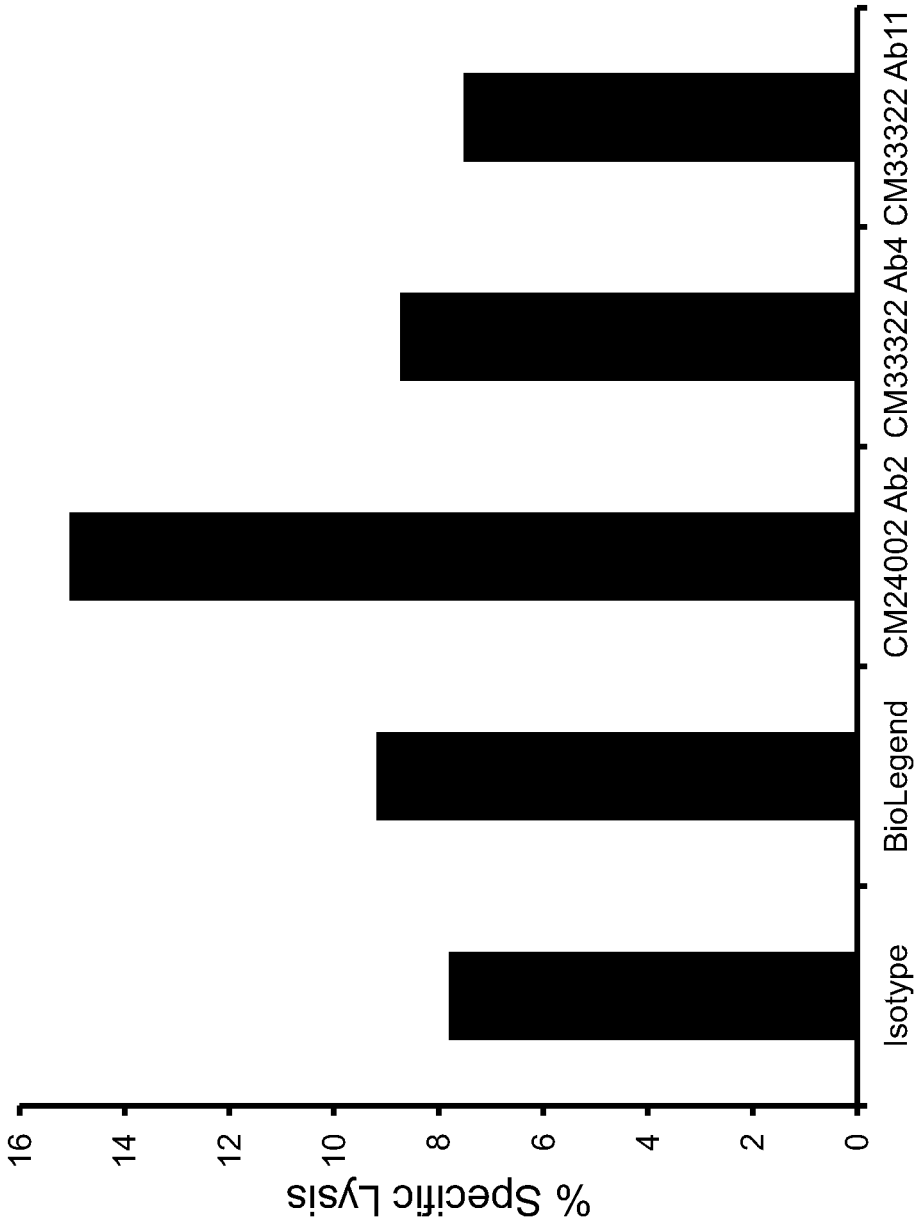

% Specific Lysis
0
2
4
6
8
10
12
14
16
Isotype
BioLegend
CM24002 Ab2
CM33322 Ab4
CM33322 Ab11

FIG. 50

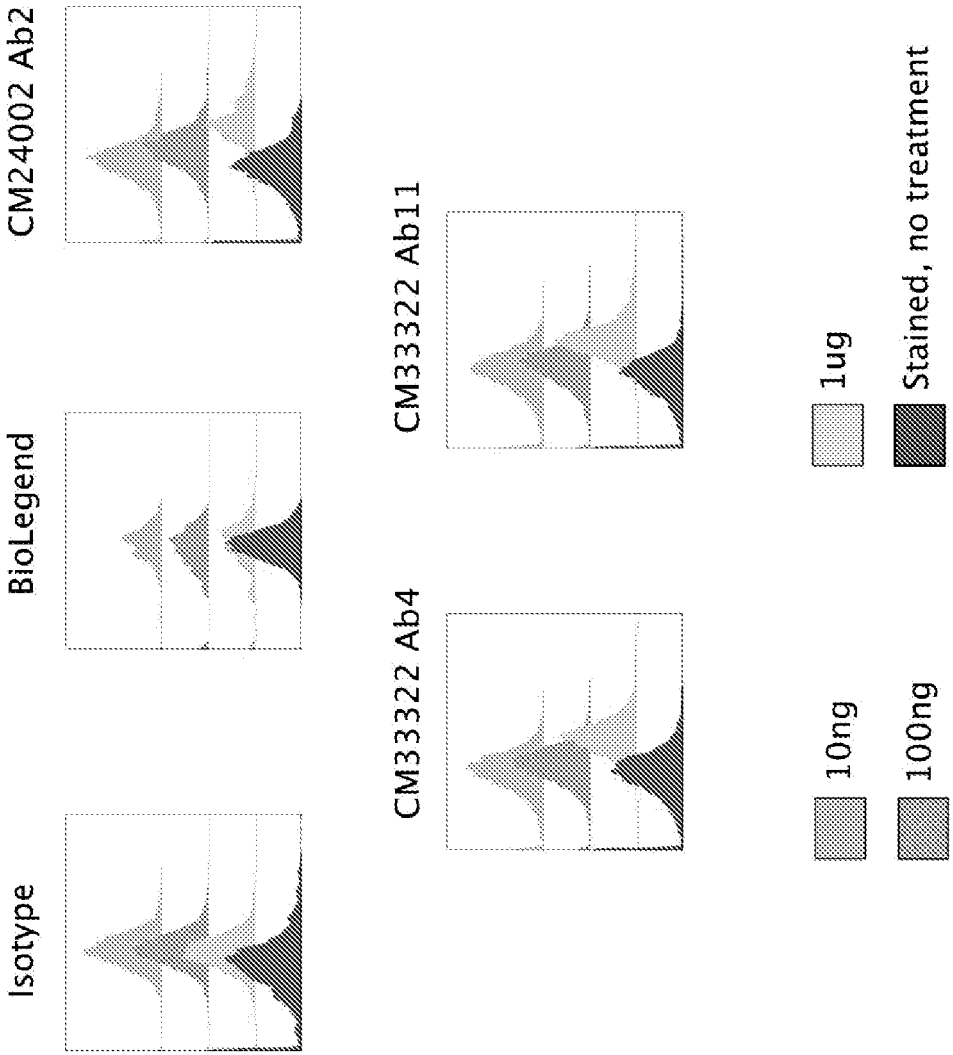
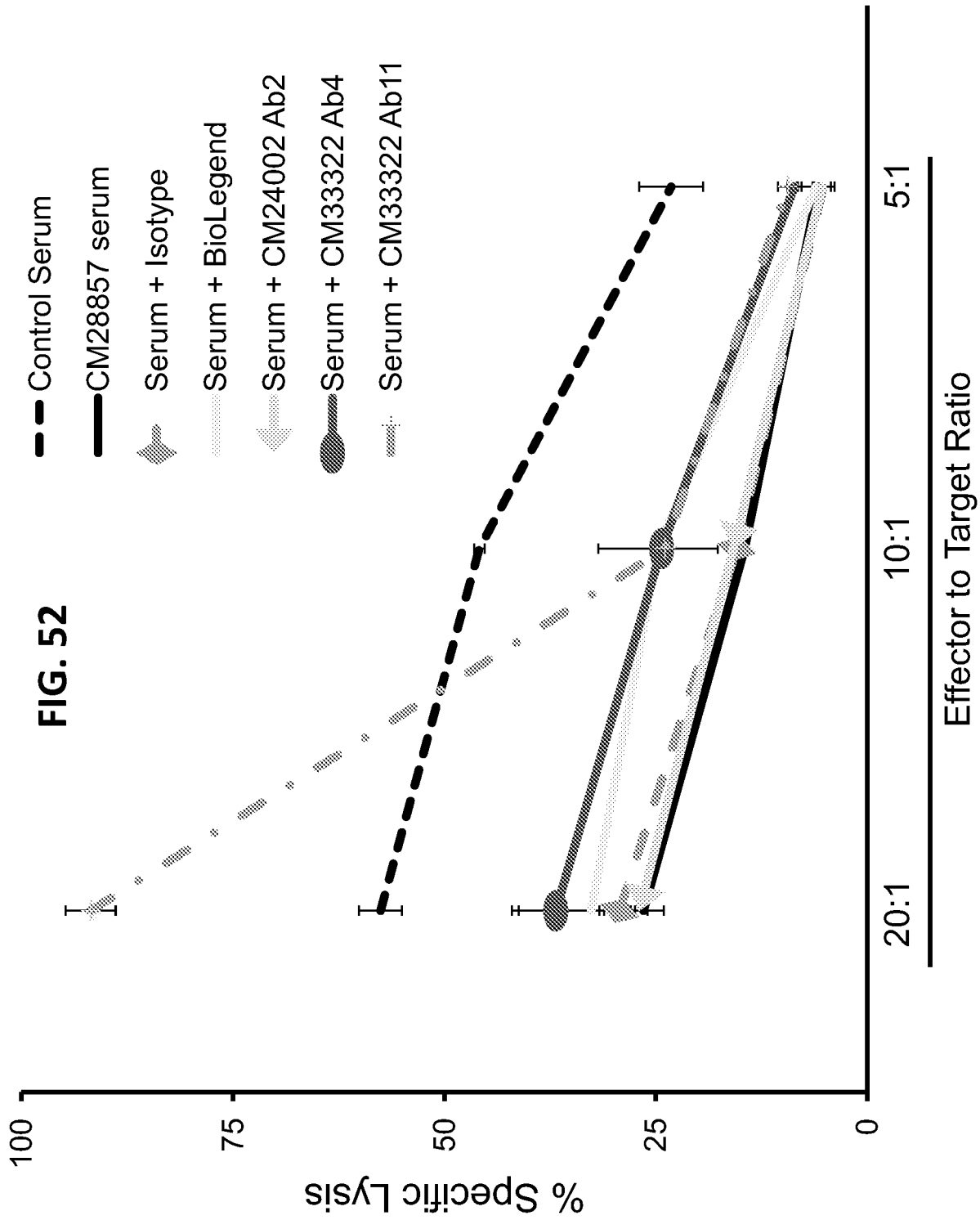

Isotype
BioLegend
CM24002 Ab2
CM33322 Ab4
CM33322 Ab11
10ng
100ng
1ug
Stained, no treatment

FIG. 51


FIG. 52
Control Serum
CM28857 serum
Serum + Isotype
Serum + BioLegend
Serum + CM24002 Ab2
Serum + CM33322 Ab4
Serum + CM33322 Ab11
% Specific Lysis
100
75
50
25
0
20:1
10:1
5:1
Effector to Target Ratio

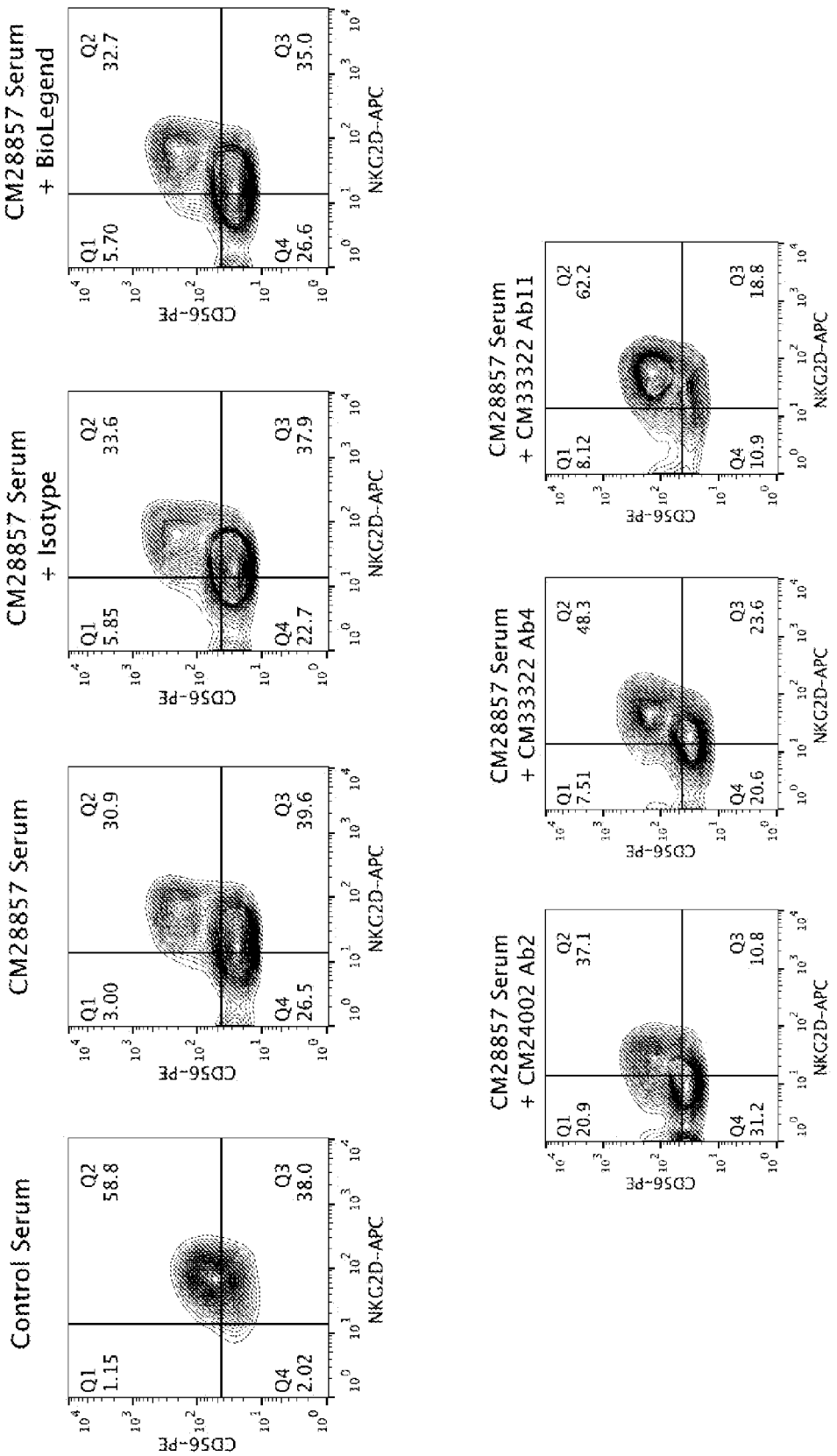
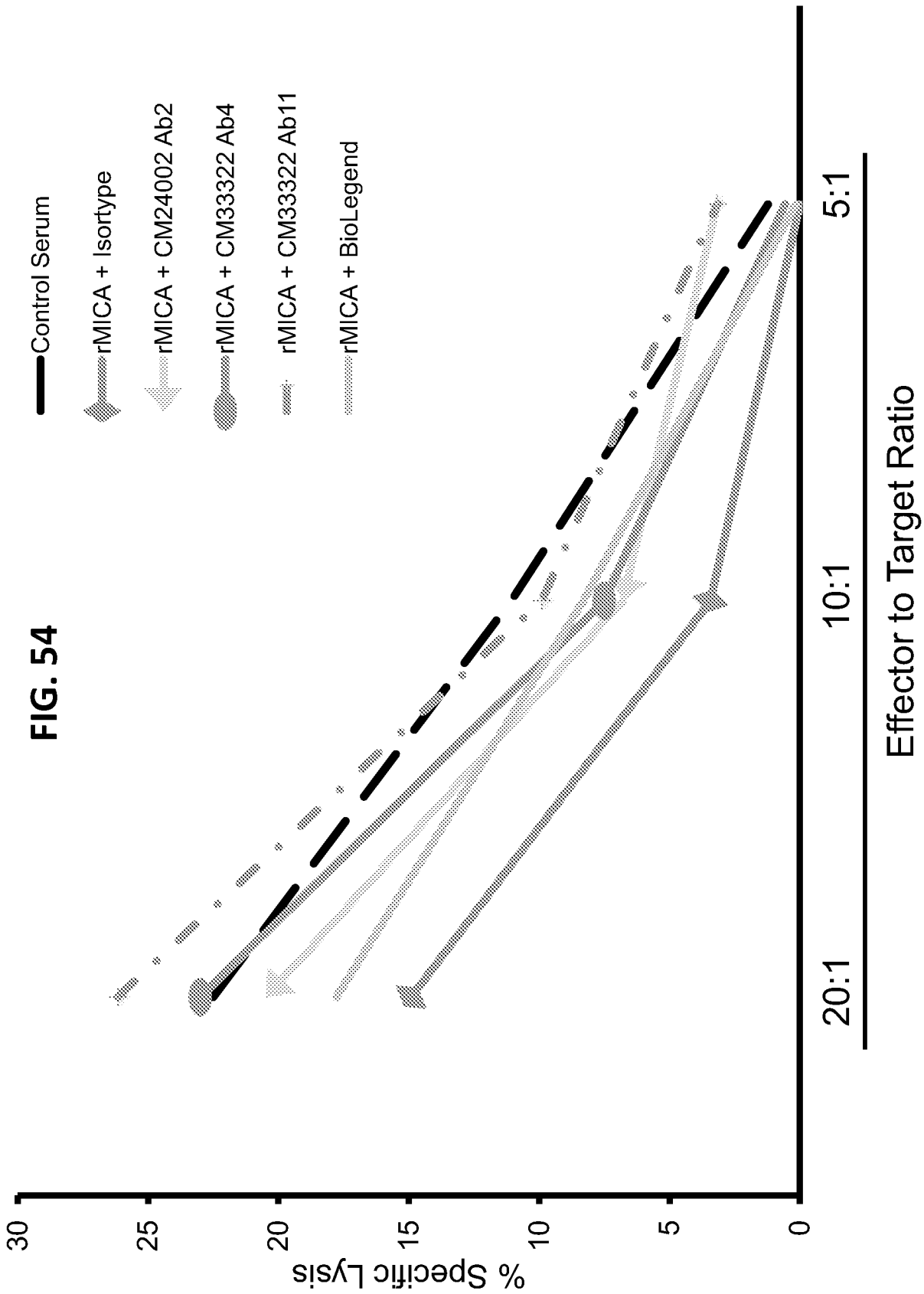

Control Serum
Q1 1.15
Q2 58.8
Q4 2.02
Q3 38.0
CD56-PE
NKG2D-APC
CM28857 Serum
Q1 3.00
Q2 30.9
Q4 26.5
Q3 39.6
CD56-PE
NKG2D-APC
CM28857 Serum + Isotype
Q1 5.85
Q2 33.6
Q4 22.7
Q3 37.9
CD56-PE
NKG2D-APC
CM28857 Serum + BioLegend
Q1 5.70
Q2 32.7
Q4 26.6
Q3 35.0
CD56-PE
NKG2D-APC
CM28857 Serum + CM24002 Ab2
Q1 20.9
Q2 37.1
Q4 31.2
Q3 10.8
CD56-PE
NKG2D-APC
CM28857 Serum + CM33322 Ab4
Q1 7.51
Q2 48.3
Q4 20.6
Q3 23.6
CD56-PE
NKG2D-APC
CM28857 Serum + CM33322 Ab11
Q1 8.12
Q2 62.2
Q4 10.9
Q3 18.8
CD56-PE
NKG2D-APC

FIG. 53

FIG. 54


Control Serum
rMICA + Isortype
rMICA + CM24002 Ab2
rMICA + CM33322 Ab4
rMICA + CM33322 Ab11
rMICA + BioLegend
% Specific Lysis
30
25
20
15
10
5
0
20:1
10:1
5:1
Effector to Target Ratio

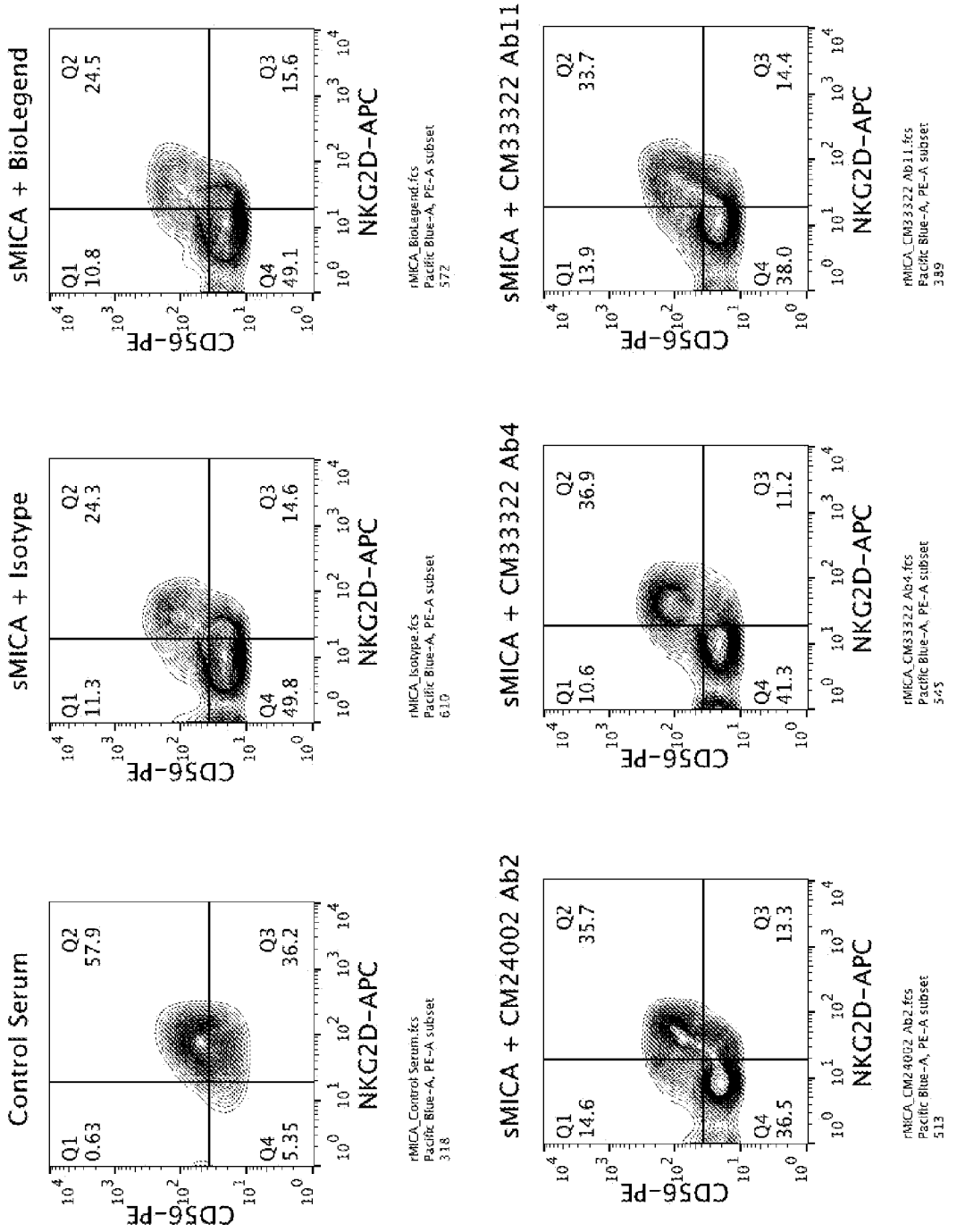

Control Serum
Q1 0.63
Q2 57.9
Q4 5.35
Q3 36.2
CD56-PE
NKG2D-APC
rMICA_Control Serum.fcs
Pacific Blue-A, PE-A subset
318
sMICA + Isotype
Q1 11.3
Q2 24.3
Q4 49.8
Q3 14.6
CD56-PE
NKG2D-APC
rMICA_Isotype.fcs
Pacific Blue-A, PE-A subset
610
sMICA + BioLegend
Q1 10.8
Q2 24.5
Q4 49.1
Q3 15.6
CD56-PE
NKG2D-APC
rMICA_BioLegend.fcs
Pacific Blue-A, PE-A subset
572
sMICA + CM24002 Ab2
Q1 14.6
Q2 35.7
Q4 36.5
Q3 13.3
CD56-PE
NKG2D-APC
rMICA_CM24002 Ab2.fcs
Pacific Blue-A, PE-A subset
513
sMICA + CM33322 Ab4
Q1 10.6
Q2 36.9
Q4 41.3
Q3 11.2
CD56-PE
NKG2D-APC
rMICA_CM33322 Ab4.fcs
Pacific Blue-A, PE-A subset
545
sMICA + CM33322 Ab11
Q1 13.9
Q2 33.7
Q4 38.0
Q3 14.4
CD56-PE
NKG2D-APC
rMICA_CM33322 Ab11.fcs
Pacific Blue-A, PE-A subset
389

FIG. 55

Epitope of CN33322 Ab29

HSLRYNLTVLSWDGSVQSGFLAEVHLDGQPFLRYDR
QKCRAKPQGQWAEDVLGNKTWDRETRDLTGNGKD
LRMTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQH
FYYDGELFLSQNVETEEWTVPQSSRAQTLAMNVRN
FLKEDAMKTKTHYHAMHADCLQELRRYLESSVVLR
RTVPPMVNVTRSEASEGNITVTCRASSFYPRNITLTW
RQDGVSLSHDTQQW**GDVLPDGNGTYQTWVATRIC**
QGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQ
TFHVSAVAAAAAAIFVIIIFYVRCCKKKTSAAEGPELV
SLQVLDQHPVGTSDHRDATQLGFQPLMSALGSTGST
EGA

FIG. 56A

FIG. 56B

Epitope of CM3322 Ab4

HSLRYNLTVLSWDGSVQSGFLAEVHLDGQPFLRYDRQKCRAKPQGQWAEDVLGNKTWDRETRDLTGNGKDLRM
TLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNVETEEWTVPQSSRAQTLAMNVRNFLKEDAM
KTKTHYHAMHADCLQELRRYLESSVVLRRTVPPMVNVTRSEASEGNITVTCRASSFYPRNITLTWRQDGVSLSHDT
QQWGDVLPDGNGTYQTWVATRICQGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQTFHVSAVAAAAAAIF
VIIIFYVRCCKKKTSAAEGPELVSLQVLDQHPVGTSDHRDATQLGFQPLMSALGSTGSTEGA

FIG. 56C

Epitope of CM3322 Ab11

HSLRYNLTVLSWDGSVQSGFLAEVHLDGQPFLRYDRQKCRAKPQGQWAEDVLGNKTWDRETRDLTGNGKDLR
MTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNVETEEWTVPQSSRAQTLAMNVRNFLKED
AMKTKTHYHAMHADCLQELRRYLESSVVLRRTVPPMVNVTRSEASEGNITVTCRASSFYPRNITLTWRQDGVSLS
HDTQQWGDVLPDGNGTYQTWVATRICQGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQTFHVSAVAAAA
AAIFVIIIFYVRCCKKKTSAAEGPELVSLQVLDQHPVGTSDHRDATQLGFQPLMSALGSTGSTEGA

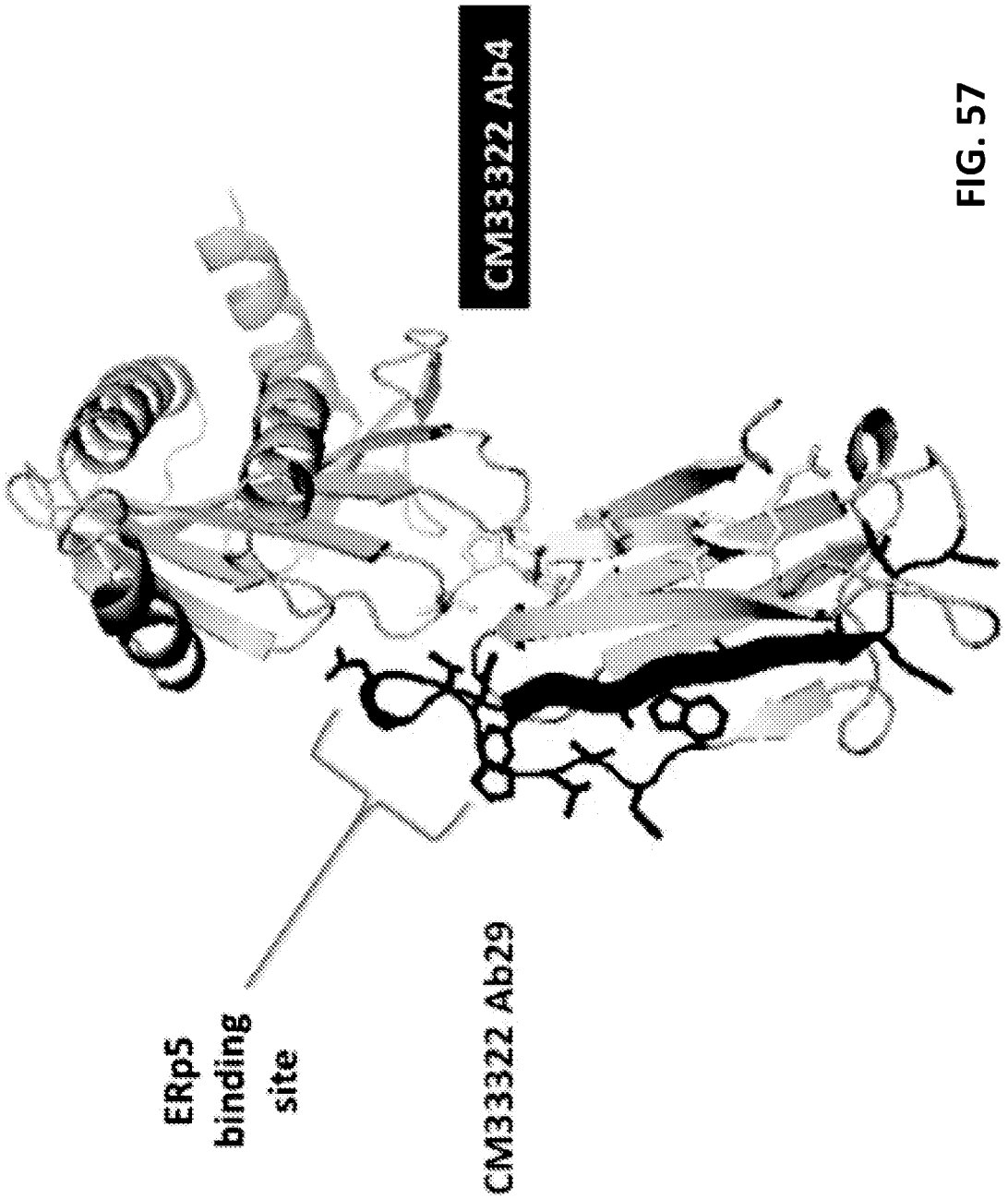


FIG. 57