Figure 1

IgG molecules in hexamer formation

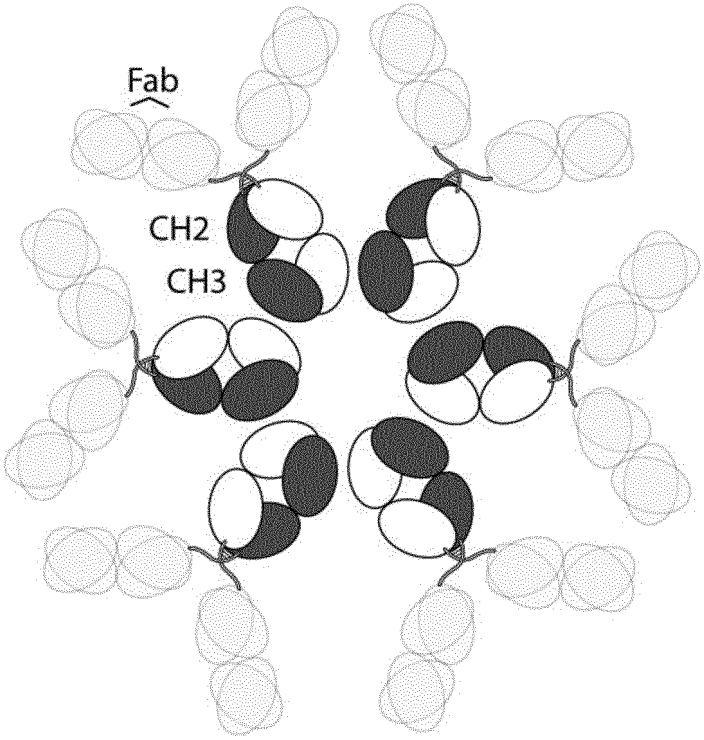


Figure 2

```
IgG1  247 PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL 306
IgG1f     PKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
IgG2      PKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVL
IgG3      PKDTLMISRTPEVTCVVVDVSHEDPEVQFKWYVDGVEVHNAKTKPREEQYNSTFRVVSVL
IgG4      PKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVL
IgE       SPFDLFIRKSPTITCLVVDLAPSKGTVNLTWSRASGKPVNHSTRKEEKQRNGTLTVTSTL
IgA1      ALEDLLLGSEANLTCTLTGLRDASG-VTFTWTPSSGKSAVQGP--PERDLCGCYSVSSVL
IgA2      ALEDLLLGSEANLTCTLTGLRDASG-ATFTWTPSSGKSAVQGP--PERDLCGCYSVSSVL
IgM       SFASIFLTKSTKLTCLVTDLTTYDS-VTISWTRQNGEAVKTHTNISESHPNATFSAVGEA
IgD       AVQDLWLRDKATFTCFVVGSDLKDAHLTWEVAG-KVPTGGVEEGLLERHSNGSQSQHSRL

IgG1  307 TVLHQDWLNGKEYKCKVSNKALPAPIEKTIS-KAKGQPREPQVYTLPPSRDELTK-NQVS 364
IgG1f     TVLHQDWLNGKEYKCKVSNKALPAPIEKTIS-KAKGQPREPQVYTLPPSREEMTK-NQVS
IgG2      TVVHQDWLNGKEYKCKVSNKGLPAPIEKTIS-KTKGQPREPQVYTLPPSREEMTK-NQVS
IgG3      TVLHQDWLNGKEYKCKVSNKALPAPIEKTIS-KTKGQPREPQVYTLPPSREEMTK-NQVS
IgG4      TVLHQDWLNGKEYKCKVSNKGLPSSIEKTIS-KAKGQPREPQVYTLPPSQEEMTK-NQVS
IgE       PVGTRDWIEGETYQCRVTHPHLPRALMRSTT-KTSGPRAAPEVYAFATPEWPGSR-DKRT
IgA1      PGCAEPWNHGKTFTCTAAYPESKTPLTATLS--KSGNTFRPEVHLLPPPSEELALNELVT
IgA2      PGCAQPWNHGETFTCTAAHPELKTPLTANIT--KSGNTFRPEVHLLPPPSEELALNELVT
IgM       SICEDDWNSGERFTCTVTHTDLPSPLKQTISRPKGVALHRPDVYLLPPAREQLNLRESAT
IgD       TLPRSLWNAGTSVTCTLNHPSLPPQRLMALREPAAQAPVKLSLNLLASSDPPEAA---SW

IgG1  365 LTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVLDS---DGSFFLYSKLTVDKSRWQQ 419
IgG1f     LTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVLDS---DGSFFLYSKLTVDKSRWQQ
IgG2      LTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPMLDS---DGSFFLYSKLTVDKSRWQQ
IgG3      LTCLVKGFYPSDIAVEWESSGQ--PENNYNTTPPMLDS---DGSFFLYSKLTVDKSRWQQ
IgG4      LTCLVKGFYPSDIAVEWESNGQ--PENNYKTTPPVLDS---DGSFFLYSRLTVDKSRWQE
IgE       LACLIQNFMPEDISVQWLHNEVQLPDARHSTTQPRKTK---GSGFFVFSRLEVTRAEWEQ
IgA1      LTCLARGFSPKDVLVRWLQGSQELPREKYLTWASRQEPSQGTTTFAVTSILRVAAEDWKK
IgA2      LTCLARGFSPKDVLVRWLQGSQELPREKYLTWASRQEPSQGTTTFAVTSILRVAAEDWKK
IgM       ITCLVTGFSPADVFVQWMQRGQPLSPEKYVTSAPMPEP-QAPGRYFAHSILTVSEEEWNT
IgD       LLCEVSGFSPPNILLMWLEDQREVNTSGFAPARPPPQP--GSTTFWAWSVLRVPAPPSPQ

IgG1  420 GNVFSCSVMHEALHN-HYTQKSLSLSPGK------------------ 447
IgG1f     GNVFSCSVMHEALHN-HYTQKSLSLSPGK------------------
IgG2      GNVFSCSVMHEALHN-HYTQKSLSLSPGK------------------
IgG3      GNIFSCSVMHEALHN-RFTQKSLSLSPGK------------------
IgG4      GNVFSCSVMHEALHN-HYTQKSLSLSLGK------------------
IgE       KDEFICRAVHEAASPSQTVQRAVSVNPGK------------------
IgA1      GDTFSCMVGHEALPL-AFTQKTIDRLAGKPTHVNVSVVMAEVDGTCY
IgA2      GDTFSCMVGHEALPL-AFTQKTIDRLAGKPTHVNVSVVMAEVDGTCY
IgM       GETYTCVA-HEALPN-RVTERTVDKSTGKPTLYNVSLVMSDTAGTCY
IgD       PATYTCVVSHEDSRTLLNASRSLEVSYVTDHGPMK------------
```

Figure 2 (continued)

IgG1 = aa 130-330 of Uniprot entry P01857
IgG1f= IgG1 allotypic variant "f"
IgG2 = aa 126-326 of Uniprot entry P01859
IgG3 = aa 177-377 of Uniprot entry P01860
IgG4 = aa 127-327 of Uniprot entry P01861
IgE = aa 225-428 of Uniprot entry P01854
IgA1 = aa 133-353 of Uniprot entry P01876
IgA2 = aa 120-340 of Uniprot entry P01877
IgM = aa 230-452 of Uniprot entry P01871
IgD = aa 176-384 of Uniprot entry P01880

Figure 3A

```
EU                                                                                                                 1
                  1         2         3           4         5           6         7         8         9         0
         12345678901234567890123456789012345  678901234567890123  45678901234567890123456789012345678901234567890            12
2F8-G1    VQLVESGGGVVQPGRSLRLSCAASGFTFSTYGMH--WVRQAPGKGLEWVAVIWD--DGSYKYYGDSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCARDGITMVRGVMKDYFDY
2F8-G4    VQLVESGGGVVQPGRSLRLSCAASGFTFSTYGMH--WVRQAPGKGLEWVAVIWD--DGSYKYYGDSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVYYCARDGITMVRGVMKDYFDY
KABAT                                                                                                                  1
                  1         2         3           4         5            6         7         8            9         0
         1234567890123456789012345678901234555678901234567890122223456789012345678901234567890122223456789012345678900000000012
                                            AB                 ABC                            ABC                  ABCDEFGH

EU       1      1          1         1           1         1              1          1          1         1            2
         0      1          2         3           4         5              6          7          8         9            0
         345678901234567 89012345678901234  5678901234567890123456 78    90123456 7890123456 7890123456789012345  6 7890
2F8-G1   WGQGTLVTVSS-----ASTKGPSVFPLAPSSKS--TSGGTAALGCLVKDYFPEPVTV-SW----NSGALTSG-VHTFPAVLQS-SGLYSLSSVVTVPSSSLGT--Q-TYIC
2F8-G4   WGQGTLVTVSS-----ASTKGPSVFPLAPCSRS--TSESTAALGCLVKDYFPEPVTV-SW----NSGALTSG-VHTFPAVLQS-SGLYSLSSVVTVPSSSLGT--K-TYTC
KABAT    1      1              1         1         1         1         1         1         1         1         2
         0      1              2         3         4         5         6         7         8         9         0
         345678901233333345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678
                    ABCDE

EU       2        2               2                                                         2                       2         2
         0        1               2                                                         3                       4         5
         12345678901 234     567890 1  2345678                                             90         12   345678  901234567890
2F8-G1   NVNHKPSNTKV-DKR-----VEPKSC-D--KTHTCPP---------------------------------------------CP---------AP---ELLGGP--SVFLFPPKPKDT
2F8-G3   NVNHKPSNTKV-DKR-----VELKTP-LGDTTHTCPRCPEPKSCDTPPPCPRCPEPKSCDTPPPCPRCPEPKSCDTPPPCPRCP---------AP---ELLGGP--SVFLFPPKPKDT
2F8-G4   NVDHKPSNTKV-DKR-----VESKYG------PPCPS---------------------------------------------CP---------AP---EFLGGP--SVFLFPPKPKDT
KABAT    22          2            2         2                                                                  2           2
         01          2            3         4                                                                  5           6
         9012345678990123333456789012345678901111111111111111111111111111111111111111111111233333333334555567890111234567890123
                    A    ABC                  ABCDEFGHIJKLMNOPQRSTUVWXYZABCDEFGHIJKLMNOPQRS  ABCDEFGHI  ABC      AB
                                                                        ABCDEFGHIJKLMNOPQRS

EU       2        2         2           2           2           3
         5        6         7           8           9           0
         12345678901234567890123456789  01  2345678901234567  890
2F8-G1   LMISRTPEVTCVVVDVSHEDPEVKFNWYV--DG--VEVHNAKTKPREEQYN--STY
2F8-G4   LMISRTPEVTCVVVDVSQEDPEVQFNWYV--DG--VEVHNAKTKPREEQFN--STY
KABAT    2     2         2         2         3         3
         6     7         8         9         0         1
         45678901234567890123456789012345678901234567890123456789
```

Figure 3B

```
EU          3       3       3       3       3       3       3       3       3       3       4
            0       1       2       3       4       5       6       7       8       9       0
            1234567890123456789012 3456 78901 2345678901234567  8901234567890123456789  01234 56  789012345678901
2F8-G1      RVVSVLTVLHQDWLNGKEYKCKVSNKALPAPI-EKTI-SKAKG-QPREPQVYTLPPSRDE--LTKNQVSLTCLVKGFYPSDIAV--EWESN-GQ--PENNYKTTPPVLDS
2F8-G4      RVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSI-EKTI-SKAKG-QPREPQVYTLPPSQEE--MTKNQVSLTCLVKGFYPSDIAV--EWESN-GQ--PENNYKTTPPVLDS
KABAT       3       3       3       3       3       3       3       3       4       4
            2       3       4       5       6       7       8       9       0       1       2
            01234567890123456789011234567890123456789012345678901234567890123456789012345678901234567890123456789012345678
                                                    A
EU          4       4       4       4       4       4
            0       1       2       3       4
            1  2345678901234567890123456789012345678901234567
2F8-G1      -D--GSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
2F8-G4      -D--GSFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK
KABAT       4       4       4       4       4
            3       4       5       6       7
            90123456789012345678901234567890123456789012345678
```

Figure 4

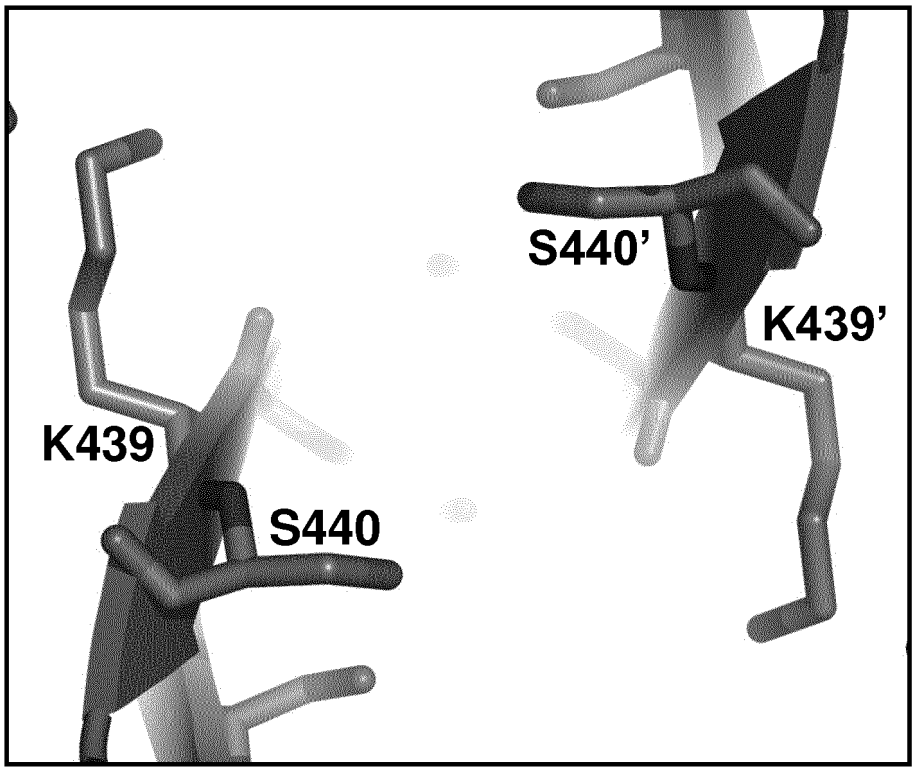


Figure 5A

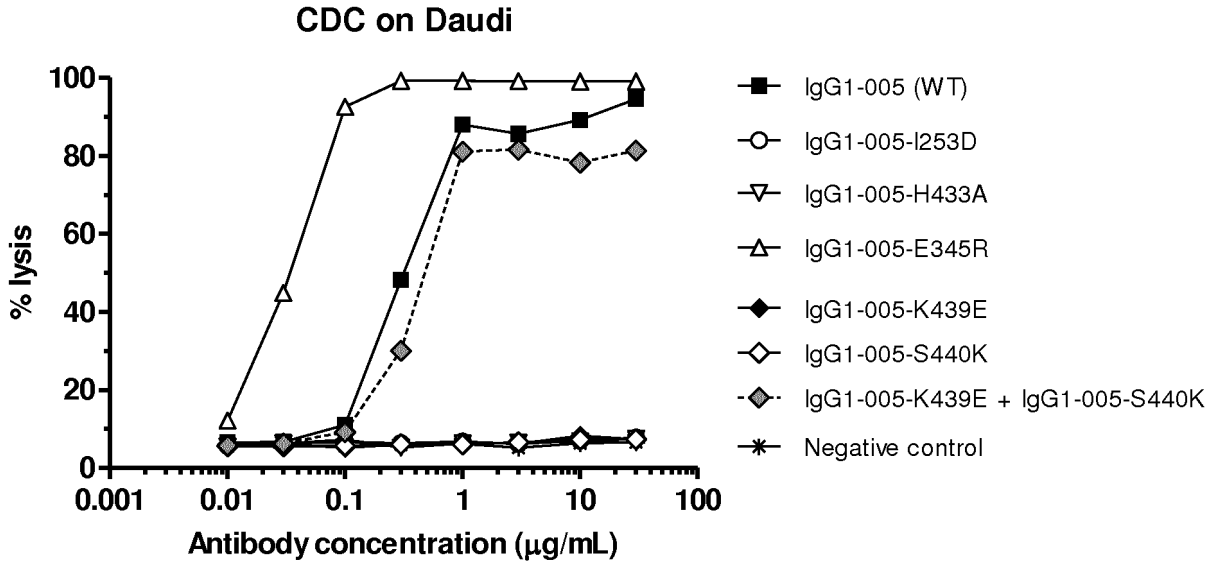


Figure 5B

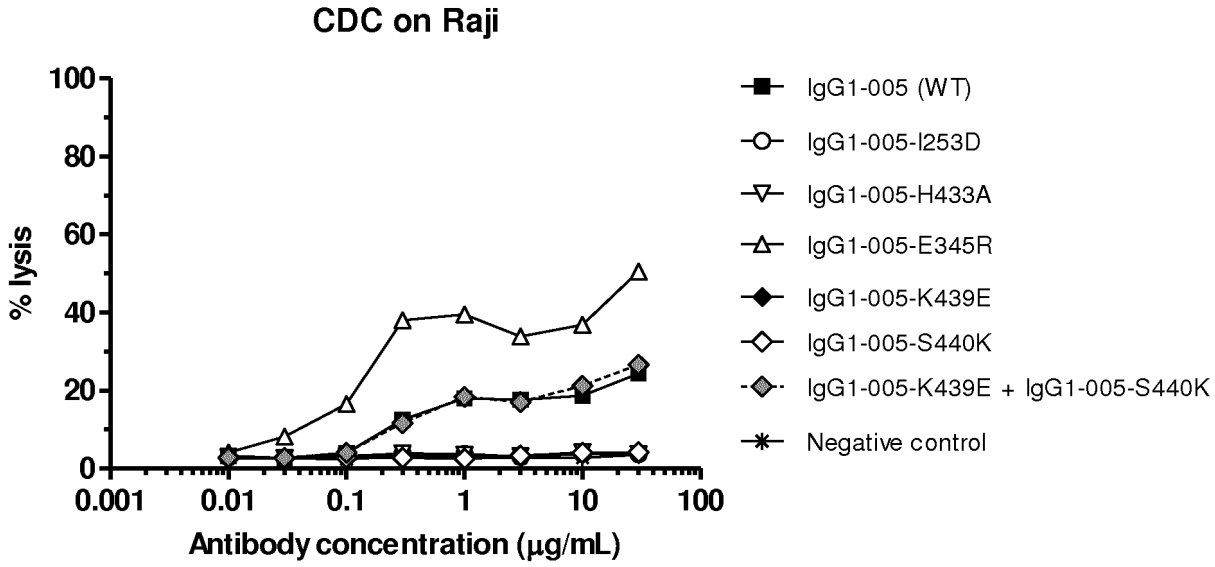


Figure 5C

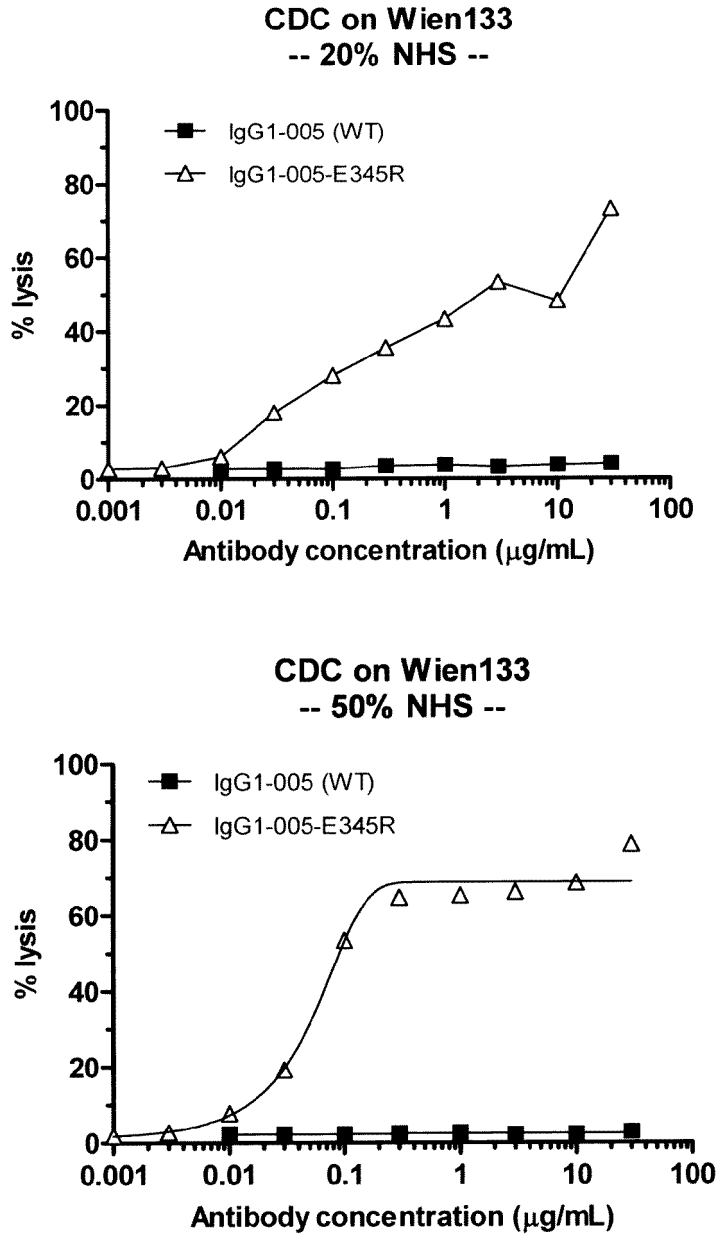

CDC on Wien133
-- 20% NHS --
IgG1-005 (WT)
IgG1-005-E345R
% lysis
100
80
60
40
20
0
0.001
0.01
0.1
1
10
100
Antibody concentration (µg/mL)
CDC on Wien133
-- 50% NHS --
IgG1-005 (WT)
IgG1-005-E345R
% lysis
100
80
60
40
20
0
0.001
0.01
0.1
1
10
100
Antibody concentration (µg/mL)

Figure 5D

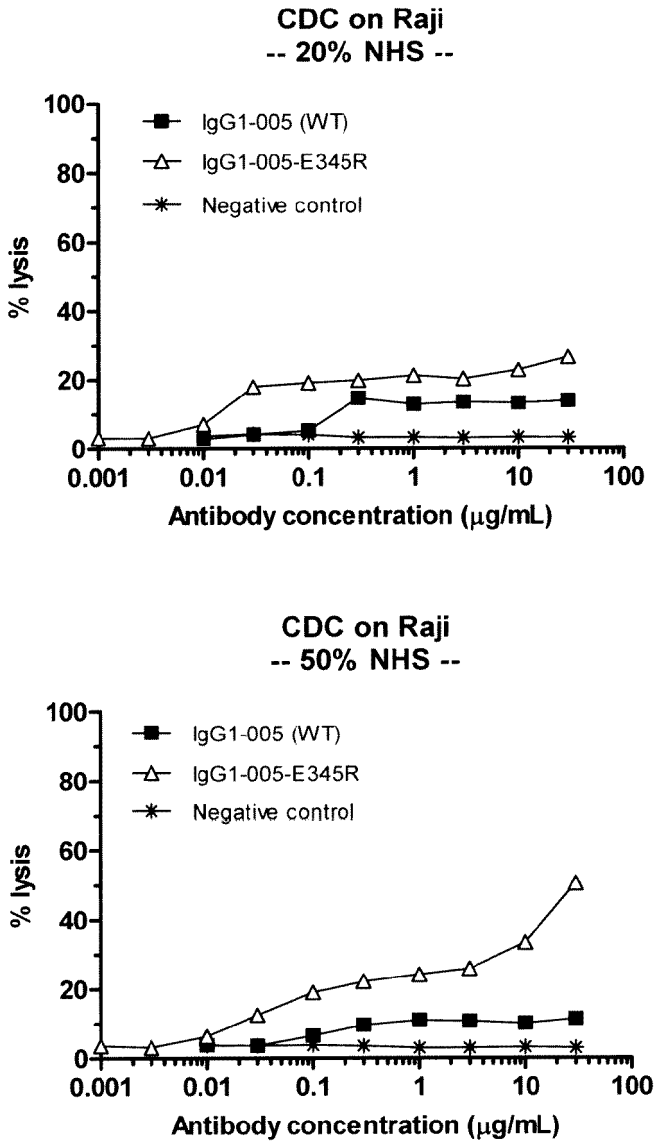
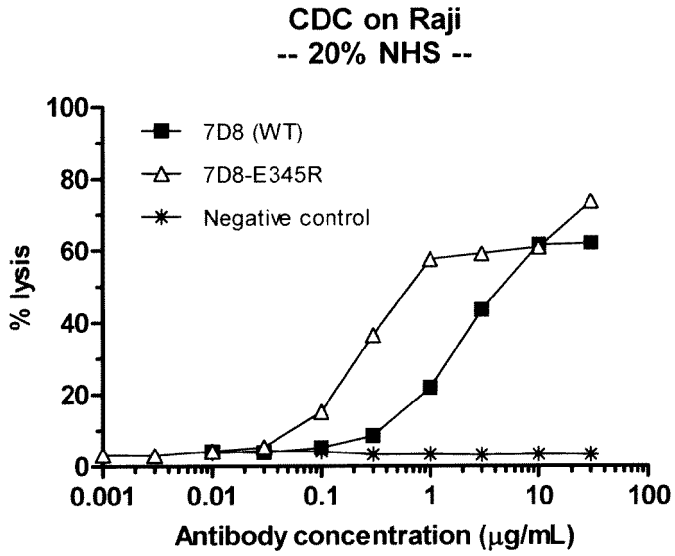

CDC on Raji
-- 20% NHS --
IgG1-005 (WT)
IgG1-005-E345R
Negative control
% lysis
100
80
60
40
20
0
0.001
0.01
0.1
1
10
100
Antibody concentration (µg/mL)
CDC on Raji
-- 50% NHS --
IgG1-005 (WT)
IgG1-005-E345R
Negative control
% lysis
Antibody concentration (µg/mL)

Figure 5D cont'd



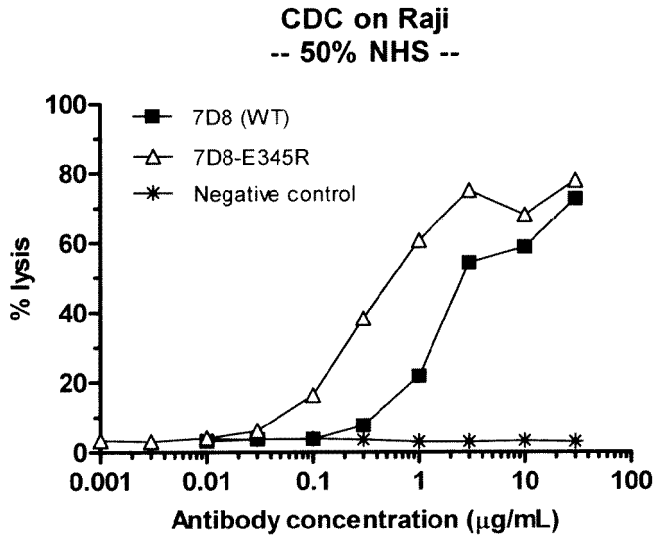


Figure 6

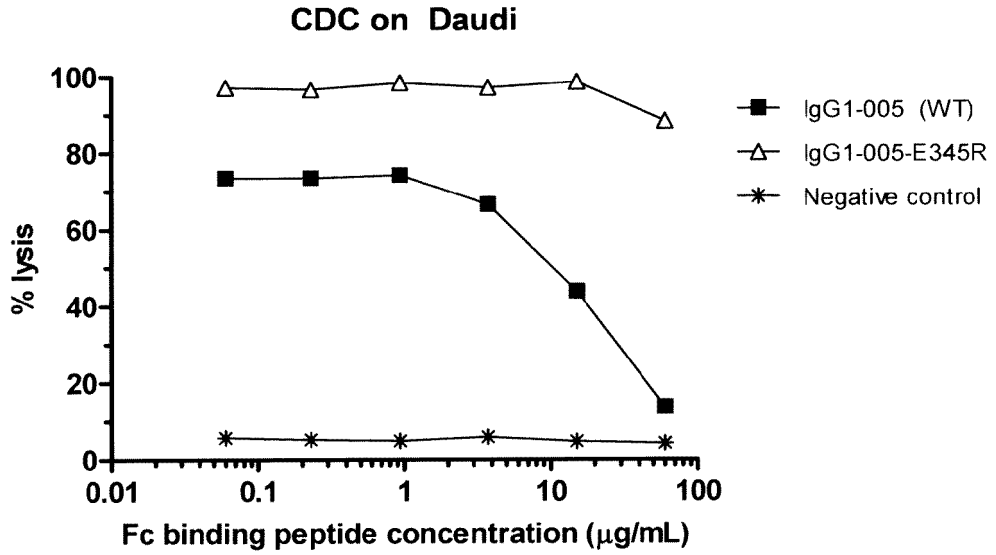


Figure 7A

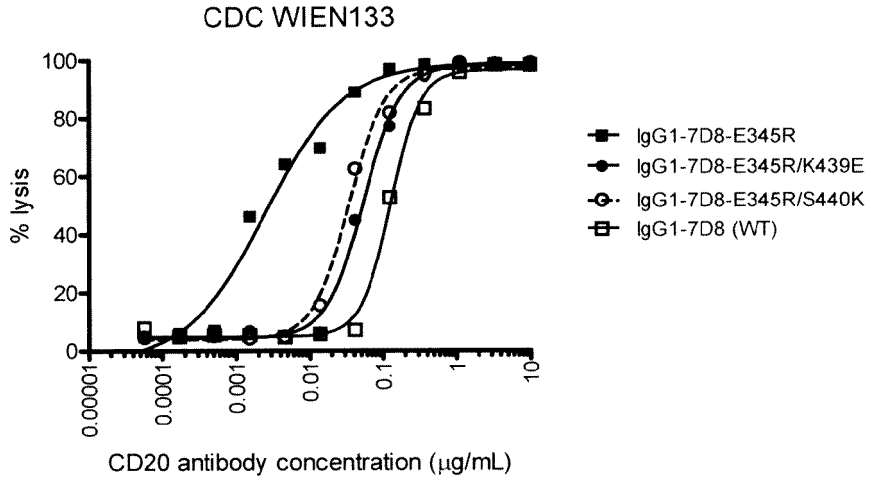


Figure 7B

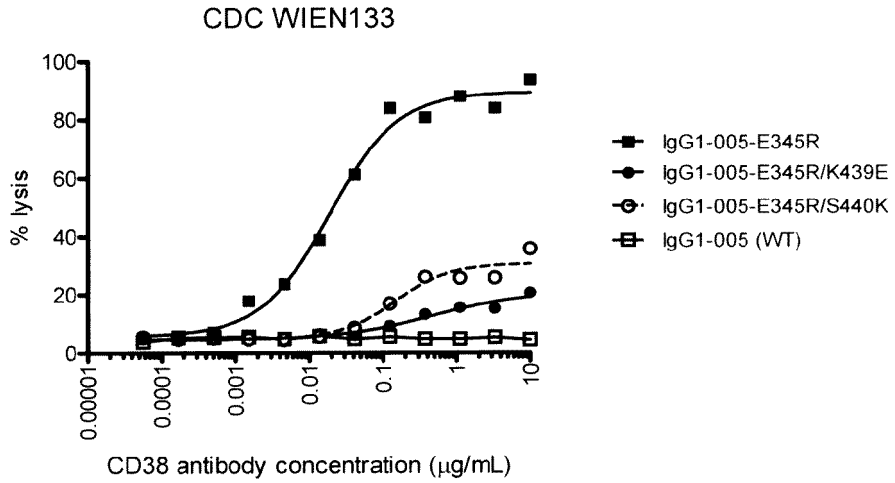


Figure 7C

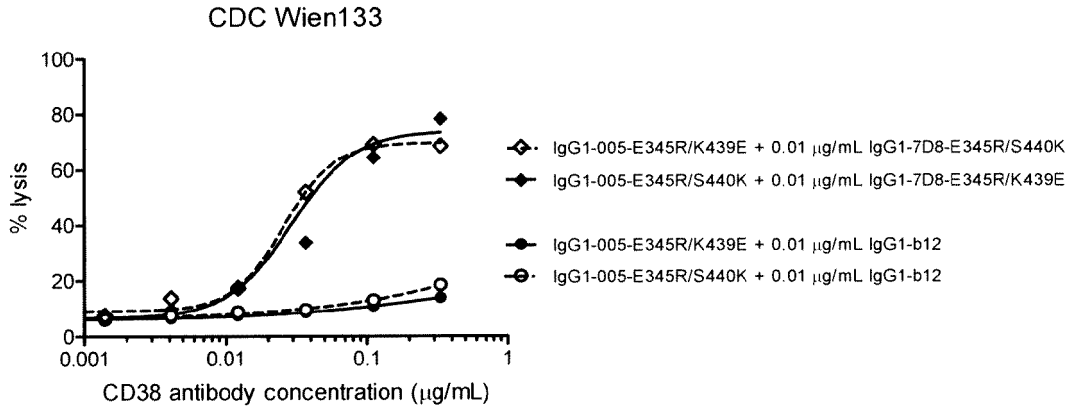


Figure 7D

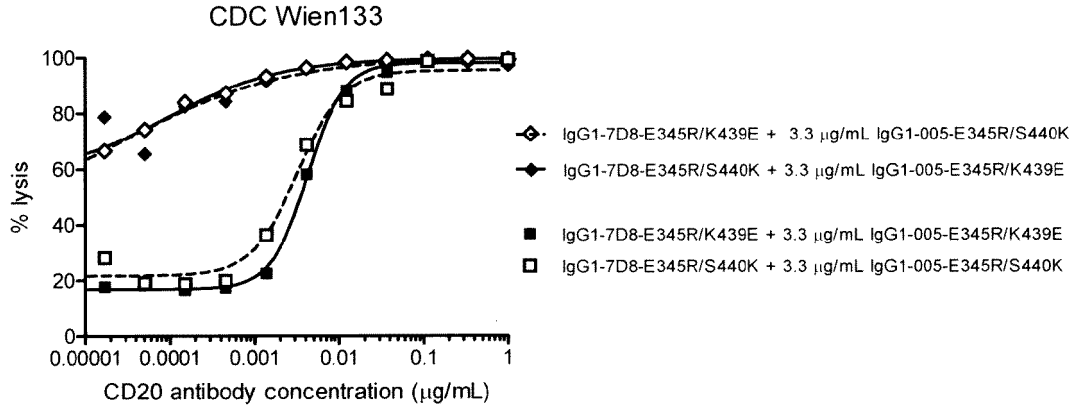


Figure 8A

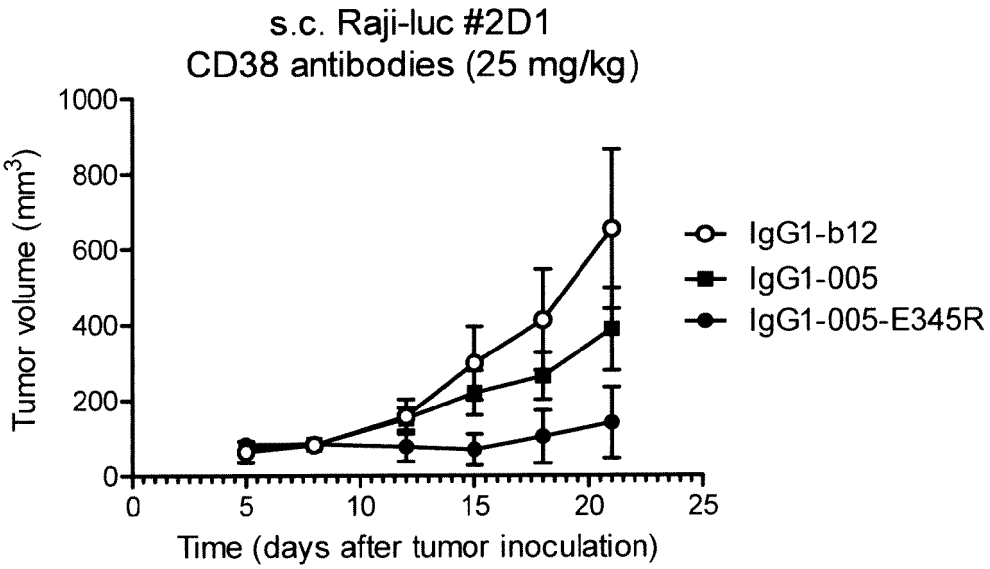


Figure 8B

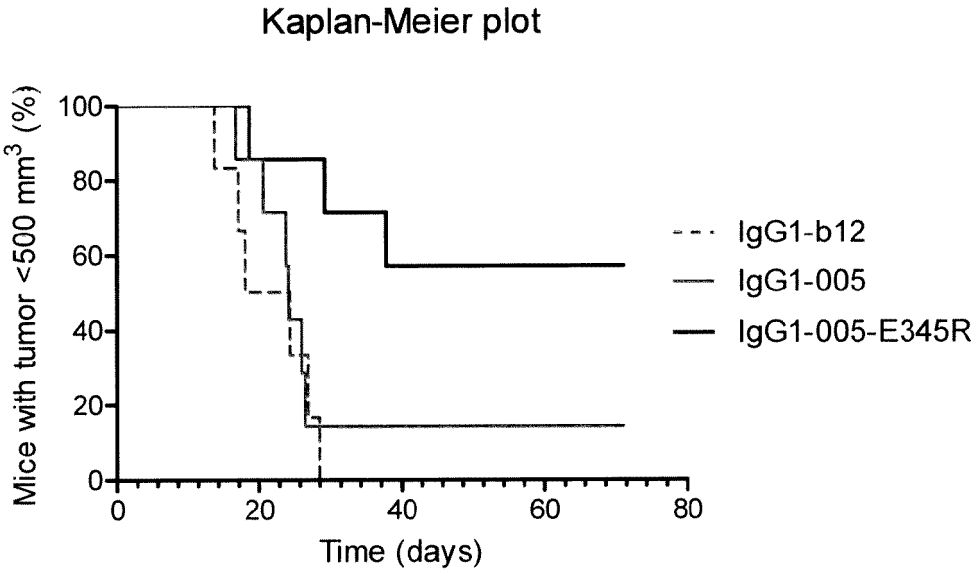


Figure 9

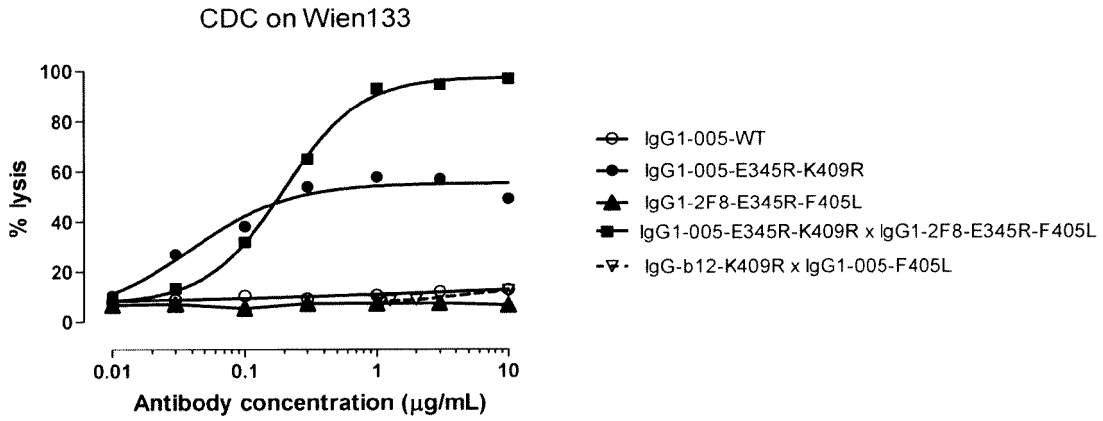


Figure 10A

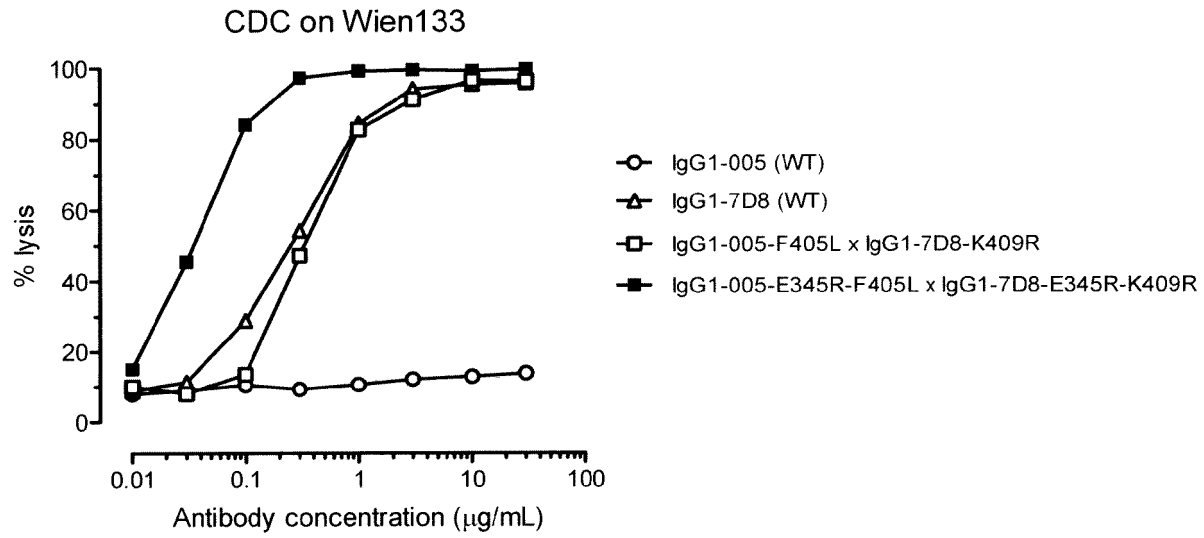


Figure 10B

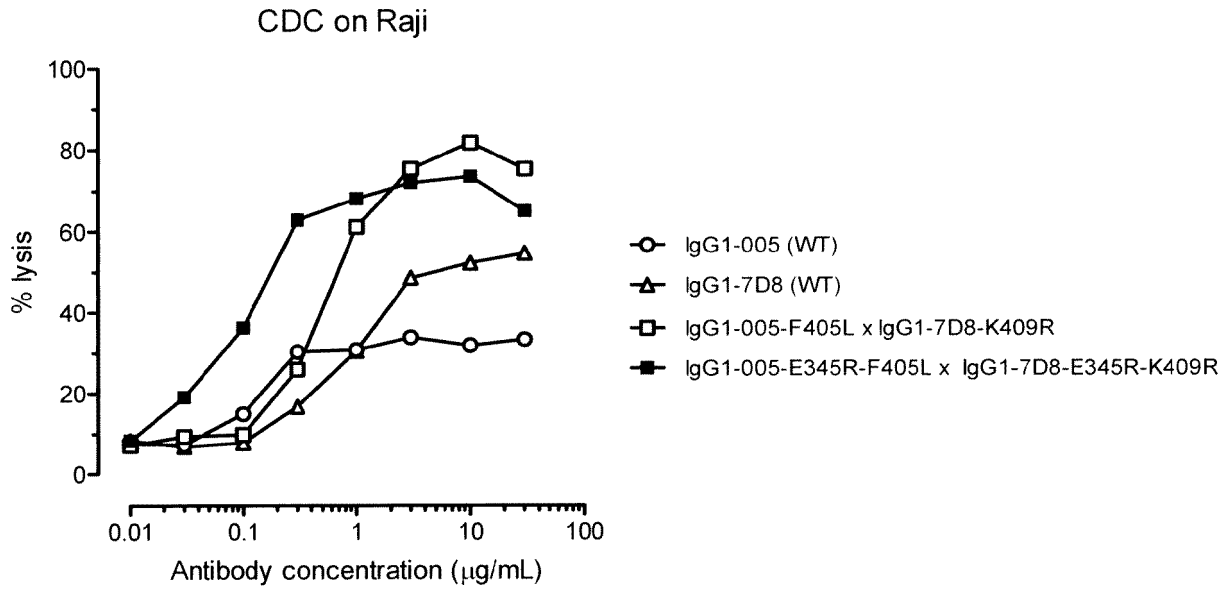


Figure 11

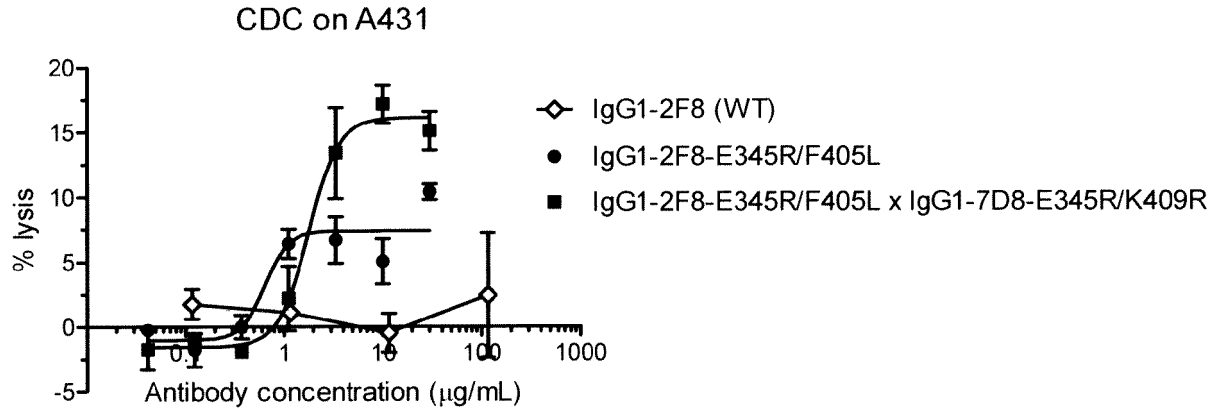


Figure 12A

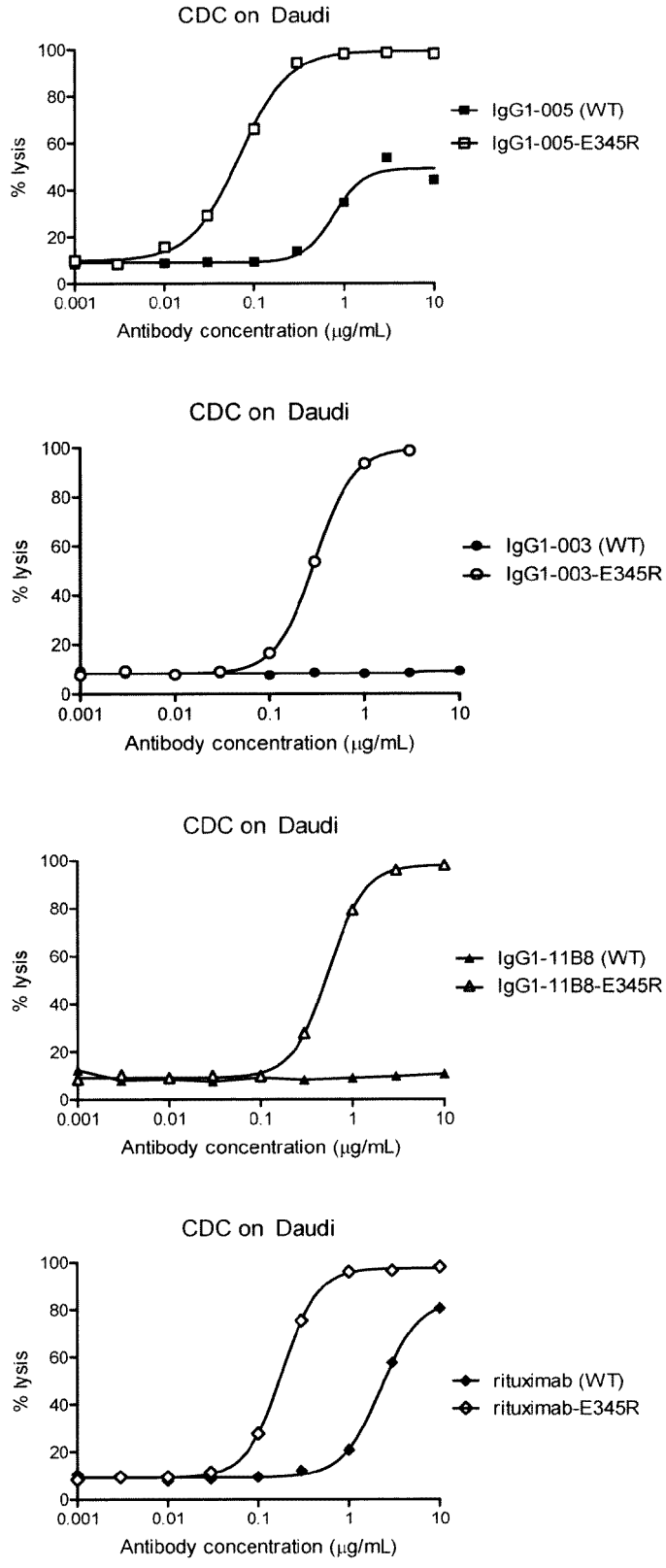
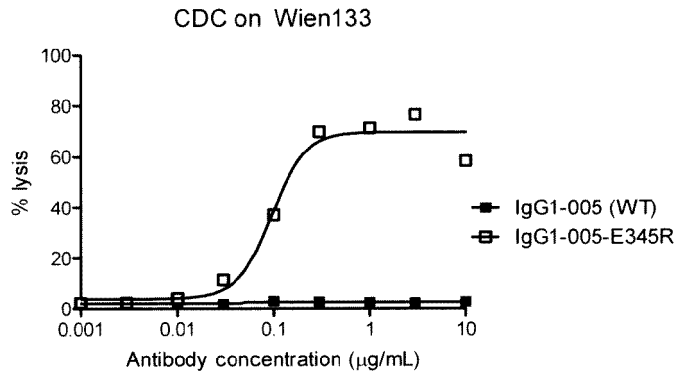
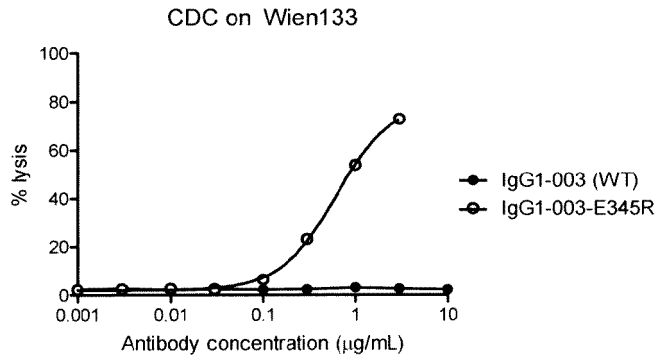
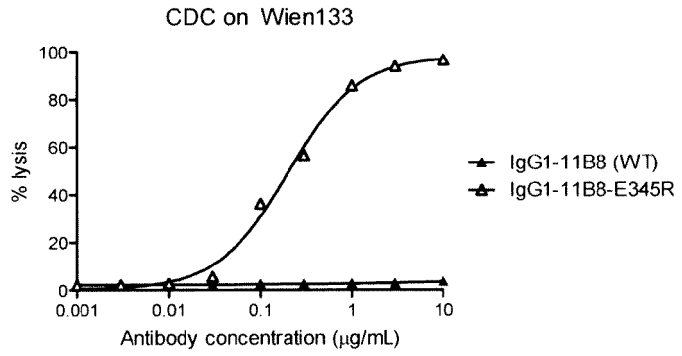

CDC on Daudi
% lysis
Antibody concentration (µg/mL)
IgG1-005 (WT)
IgG1-005-E345R
CDC on Daudi
% lysis
Antibody concentration (µg/mL)
IgG1-003 (WT)
IgG1-003-E345R
CDC on Daudi
% lysis
Antibody concentration (µg/mL)
IgG1-11B8 (WT)
IgG1-11B8-E345R
CDC on Daudi
% lysis
Antibody concentration (µg/mL)
rituximab (WT)
rituximab-E345R

Figure 12B


CDC on Wien133
% lysis
100
80
60
40
20
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-005 (WT)
IgG1-005-E345R


CDC on Wien133
% lysis
100
80
60
40
20
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-003 (WT)
IgG1-003-E345R


CDC on Wien133
% lysis
100
80
60
40
20
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-11B8 (WT)
IgG1-11B8-E345R

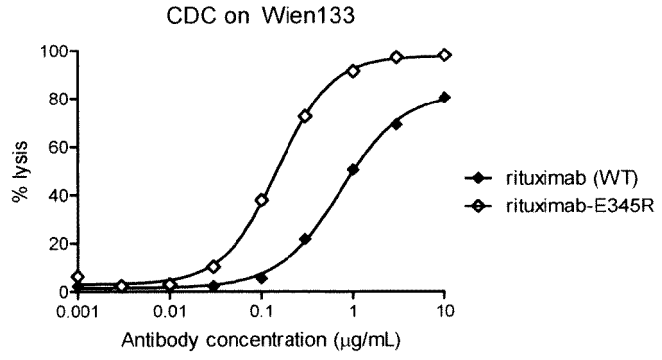

CDC on Wien133
% lysis
100
80
60
40
20
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
rituximab (WT)
rituximab-E345R

Figure 13

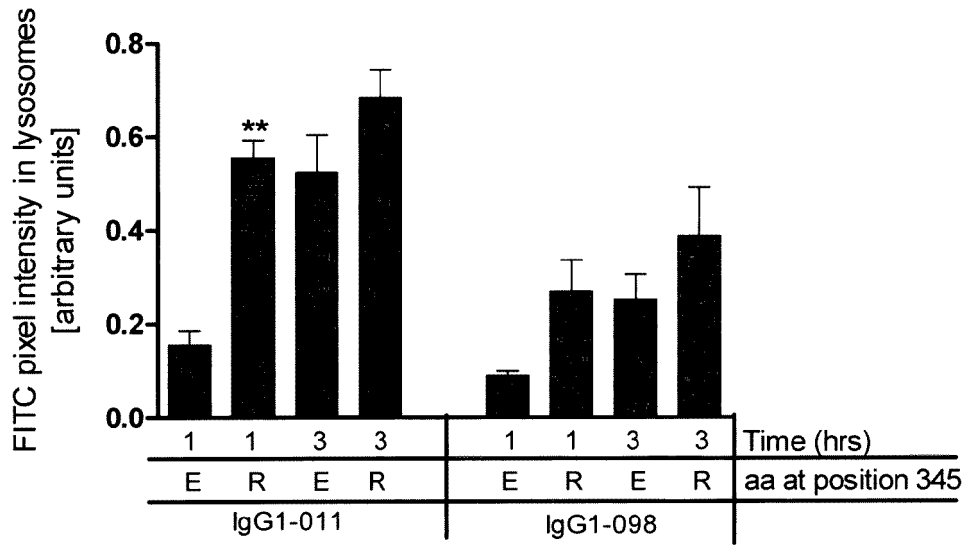


Figure 14A

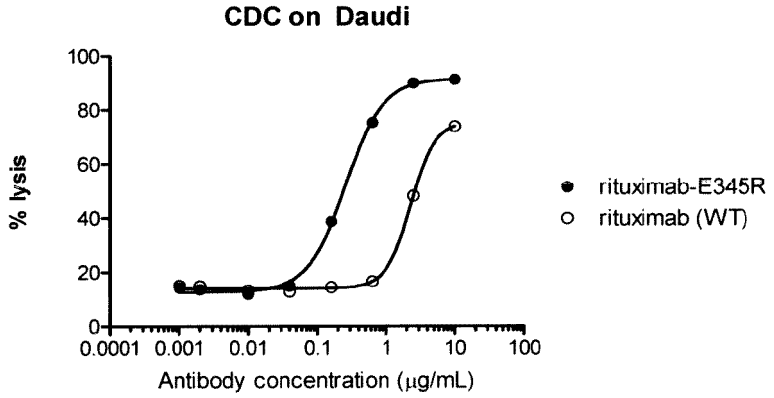


Figure 14B

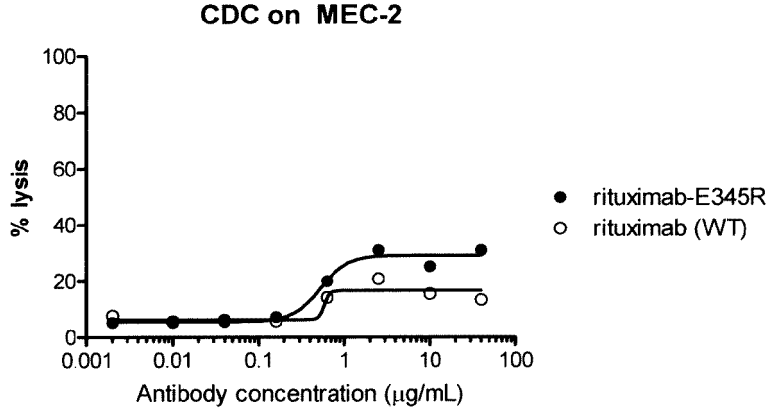


Figure 14C

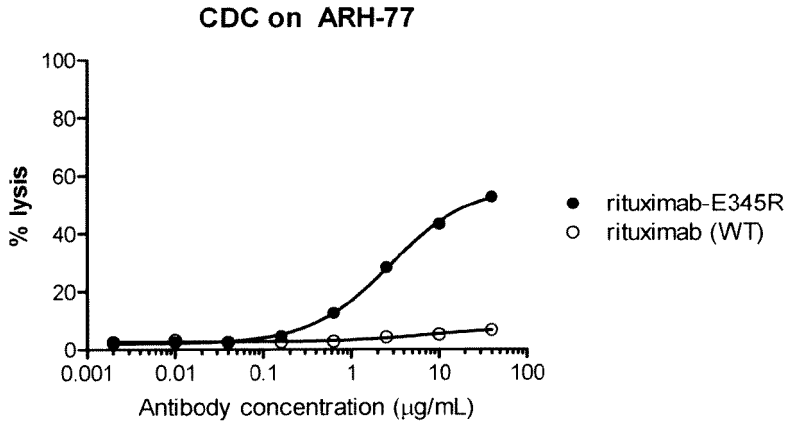


Figure 14D

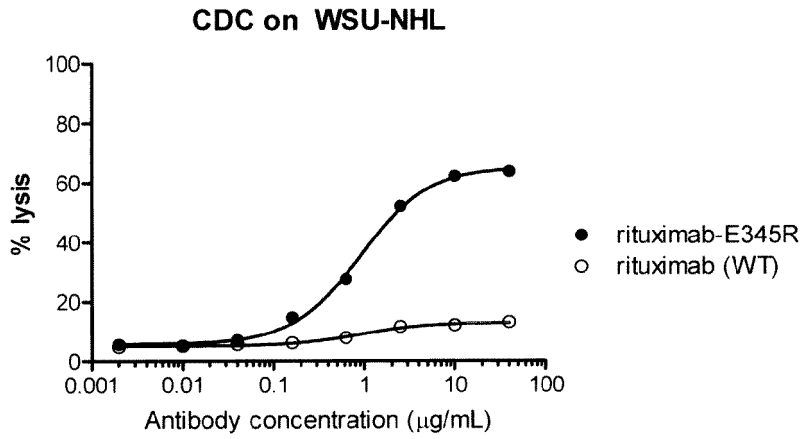


Figure 14E

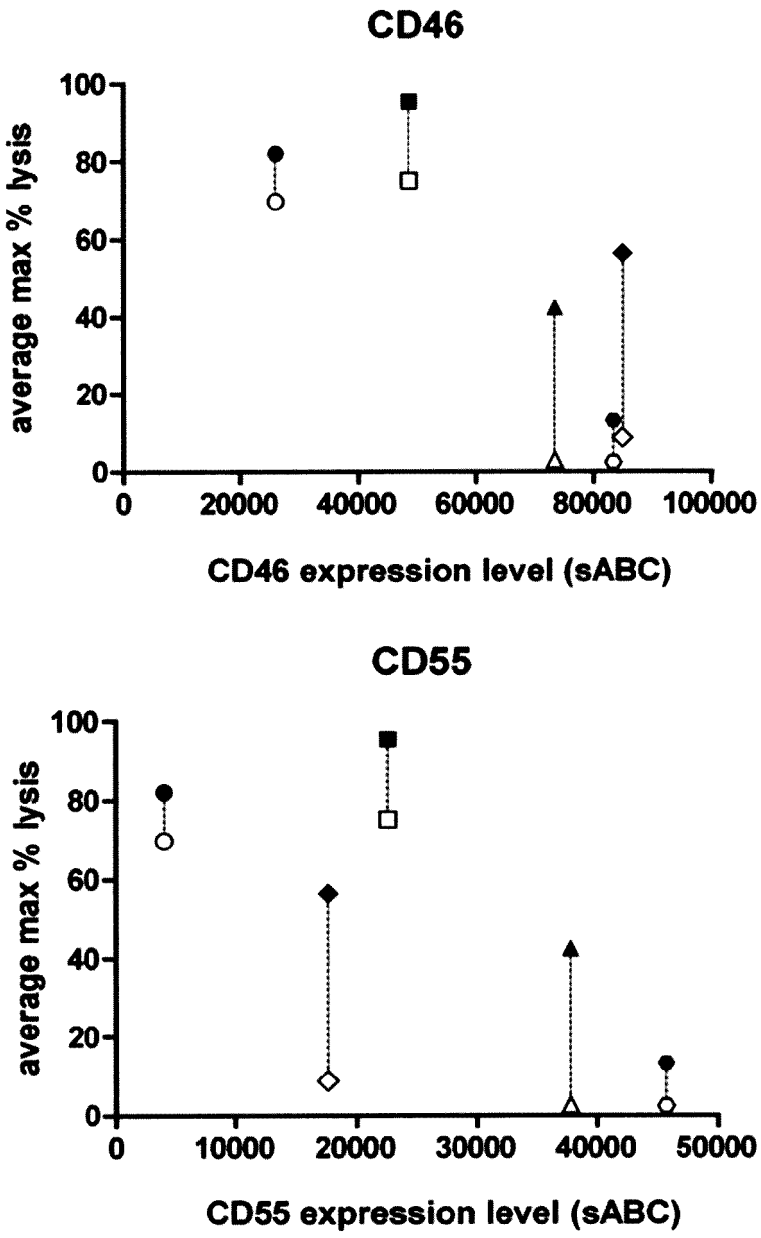
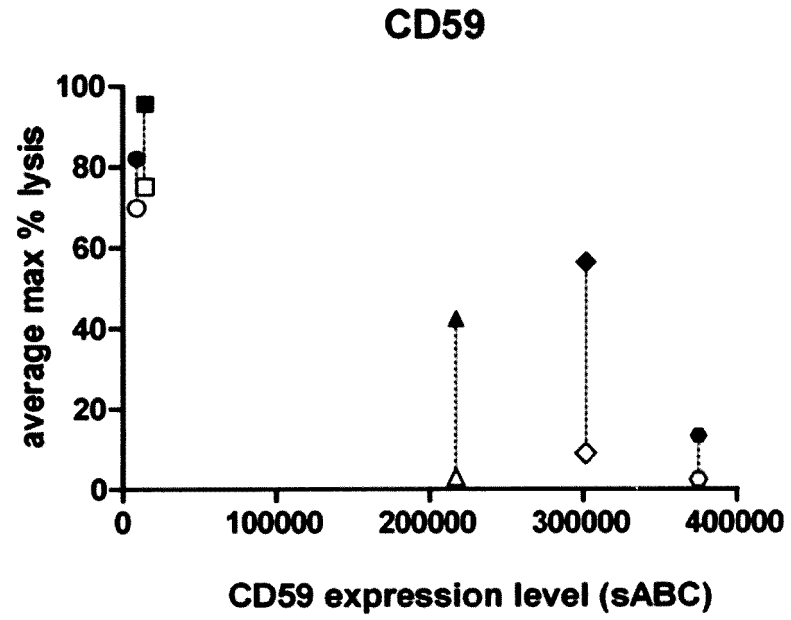

CD46
average max % lysis
100
80
60
40
20
0
0
20000
40000
60000
80000
100000
CD46 expression level (sABC)
CD55
average max % lysis
100
80
60
40
20
0
0
10000
20000
30000
40000
50000
CD55 expression level (sABC)

Figure 14E cont'd



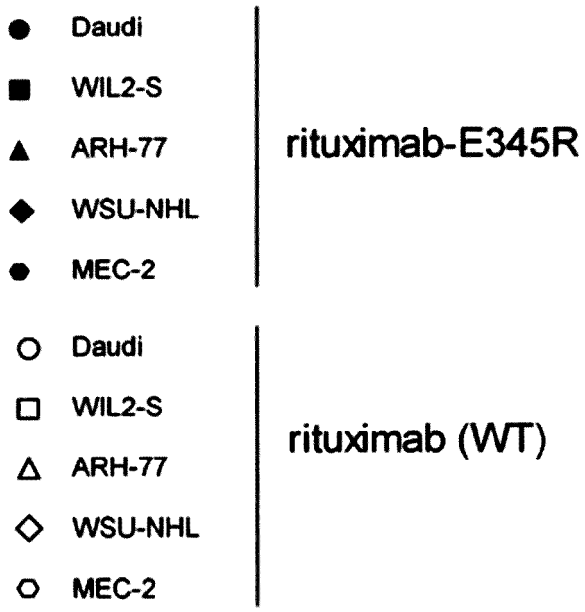
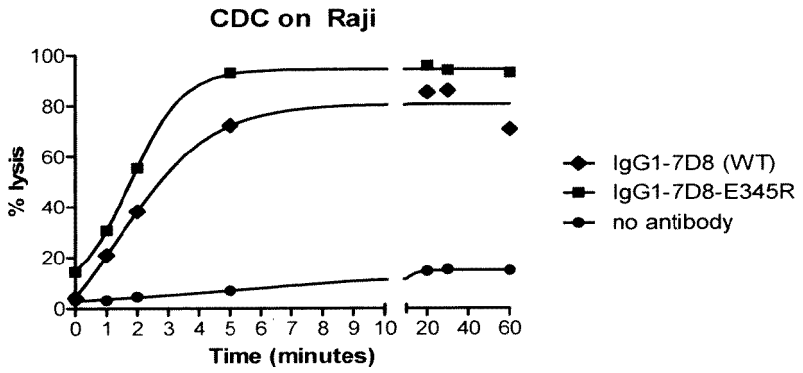
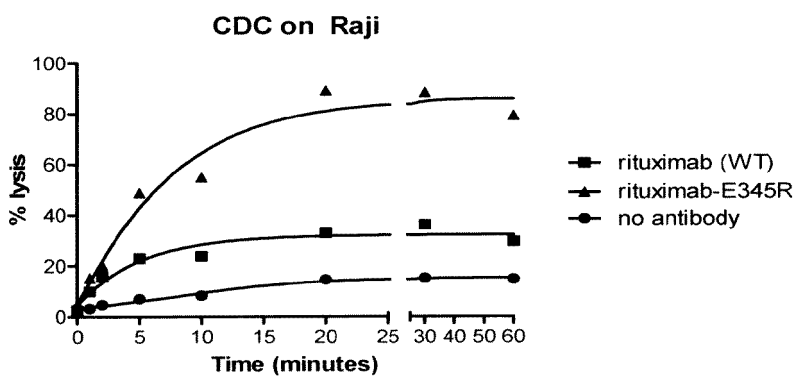


Figure 15

A



B



C

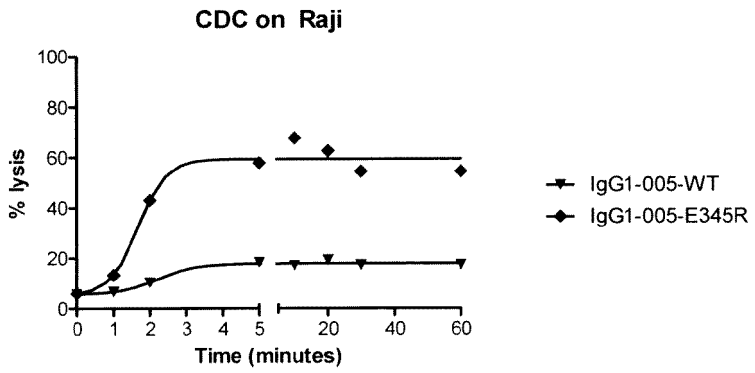


Figure 15 (continued)

D

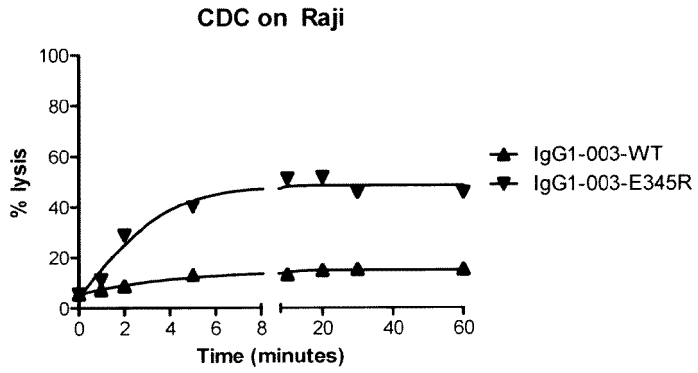


Figure 16

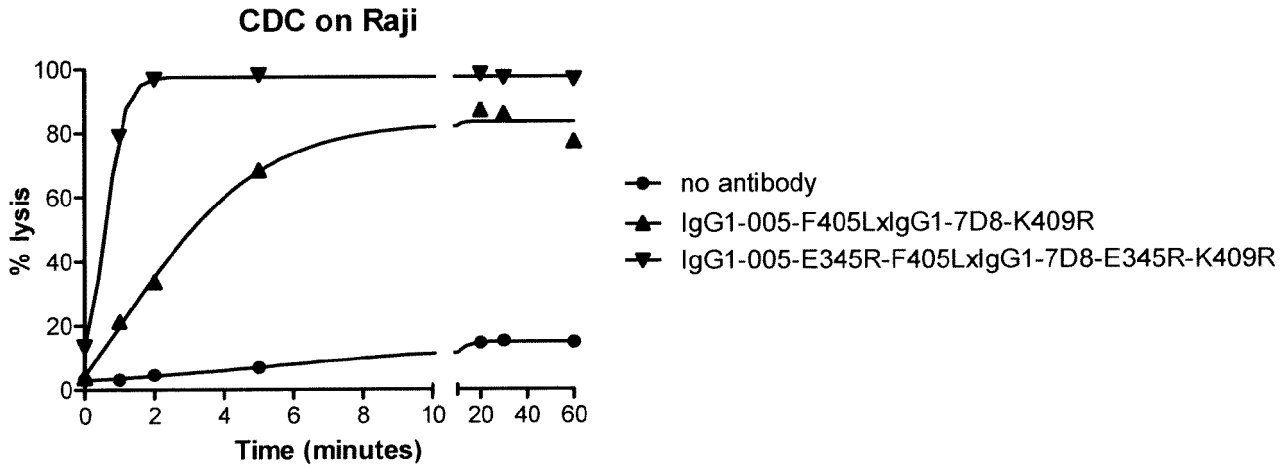


Figure 17

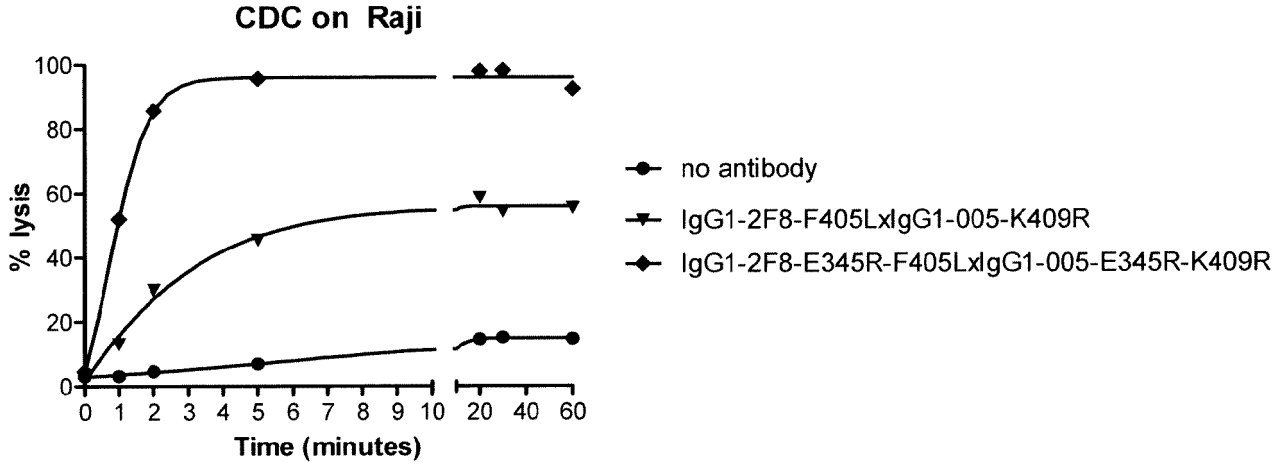

CDC on Raji
% lysis
100
80
60
40
20
0
0 1 2 3 4 5 6 7 8 9 10 20 40 60
Time (minutes)
no antibody
IgG1-2F8-F405LxIgG1-005-K409R
IgG1-2F8-E345R-F405LxIgG1-005-E345R-K409R

Figure 18

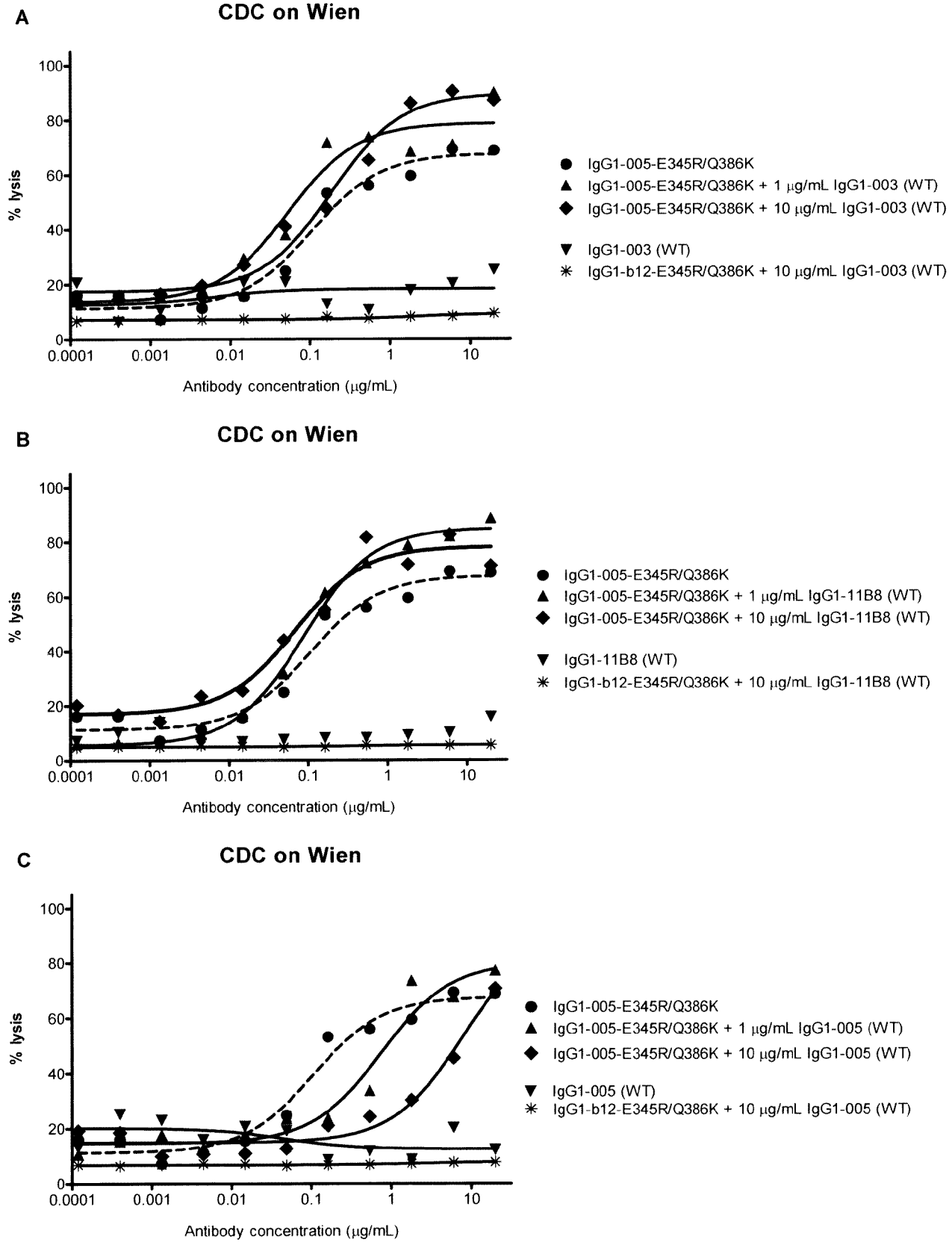
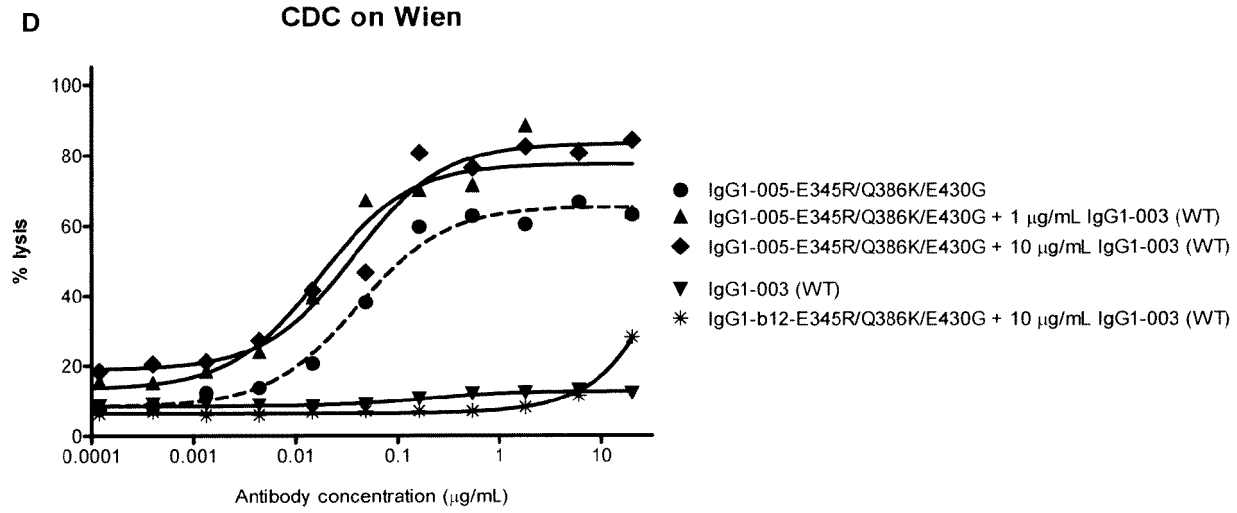
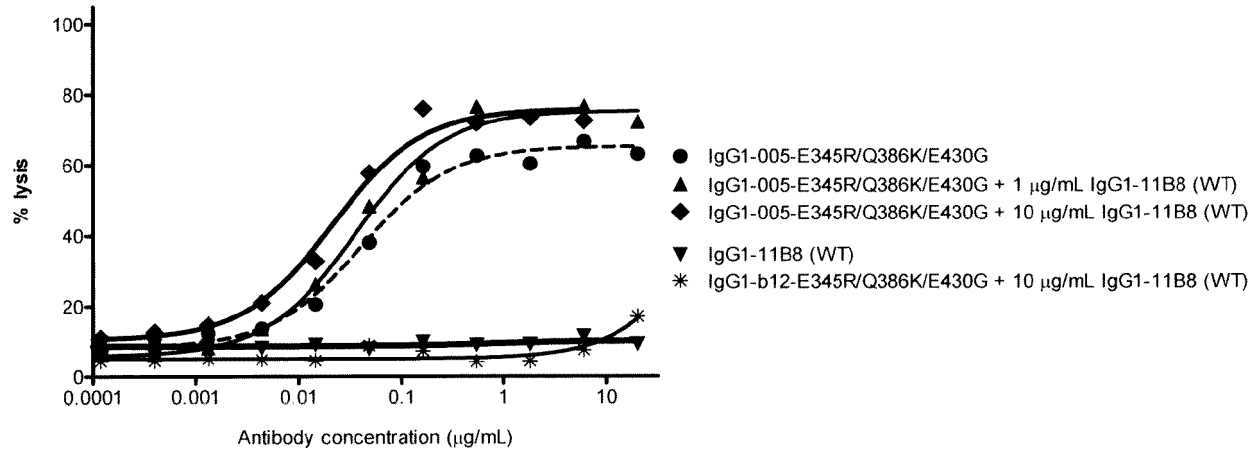

A
CDC on Wien
% lysis
Antibody concentration (µg/mL)
IgG1-005-E345R/Q386K
IgG1-005-E345R/Q386K + 1 µg/mL IgG1-003 (WT)
IgG1-005-E345R/Q386K + 10 µg/mL IgG1-003 (WT)
IgG1-003 (WT)
IgG1-b12-E345R/Q386K + 10 µg/mL IgG1-003 (WT)
B
CDC on Wien
% lysis
Antibody concentration (µg/mL)
IgG1-005-E345R/Q386K
IgG1-005-E345R/Q386K + 1 µg/mL IgG1-11B8 (WT)
IgG1-005-E345R/Q386K + 10 µg/mL IgG1-11B8 (WT)
IgG1-11B8 (WT)
IgG1-b12-E345R/Q386K + 10 µg/mL IgG1-11B8 (WT)
C
CDC on Wien
% lysis
Antibody concentration (µg/mL)
IgG1-005-E345R/Q386K
IgG1-005-E345R/Q386K + 1 µg/mL IgG1-005 (WT)
IgG1-005-E345R/Q386K + 10 µg/mL IgG1-005 (WT)
IgG1-005 (WT)
IgG1-b12-E345R/Q386K + 10 µg/mL IgG1-005 (WT)

Figure 18 (continued)

D



E



F

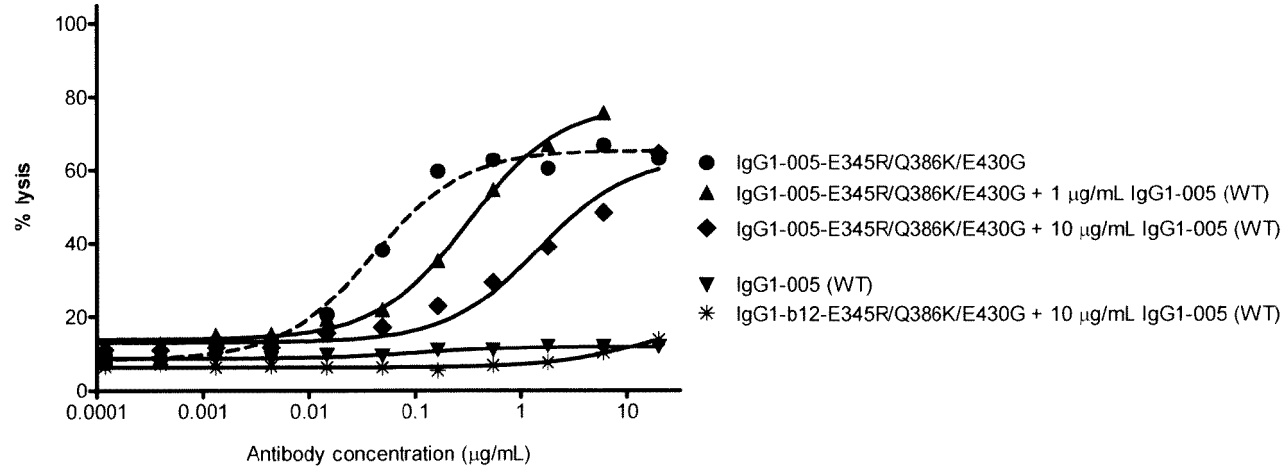


Figure 19

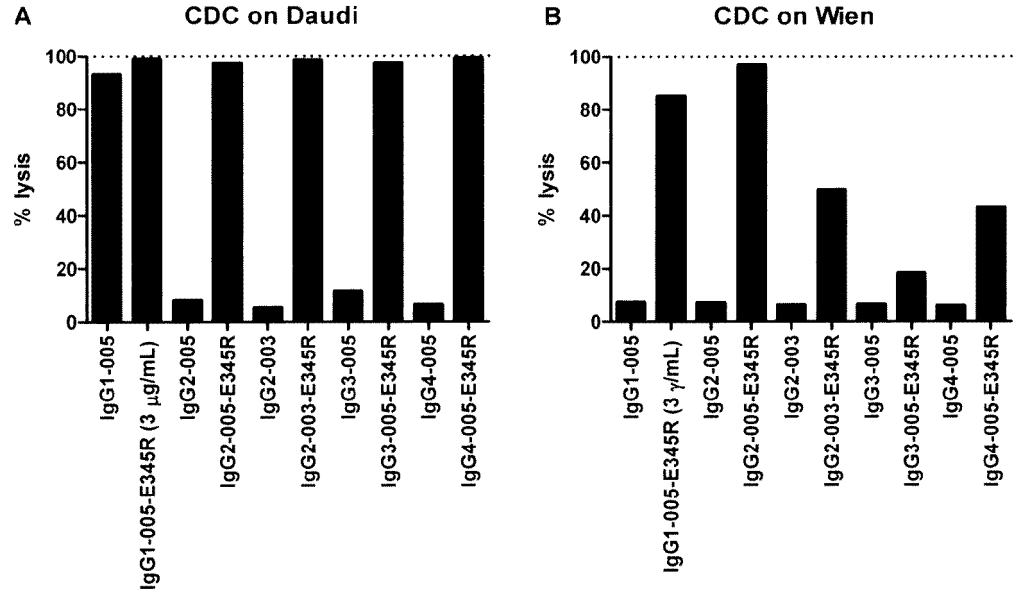
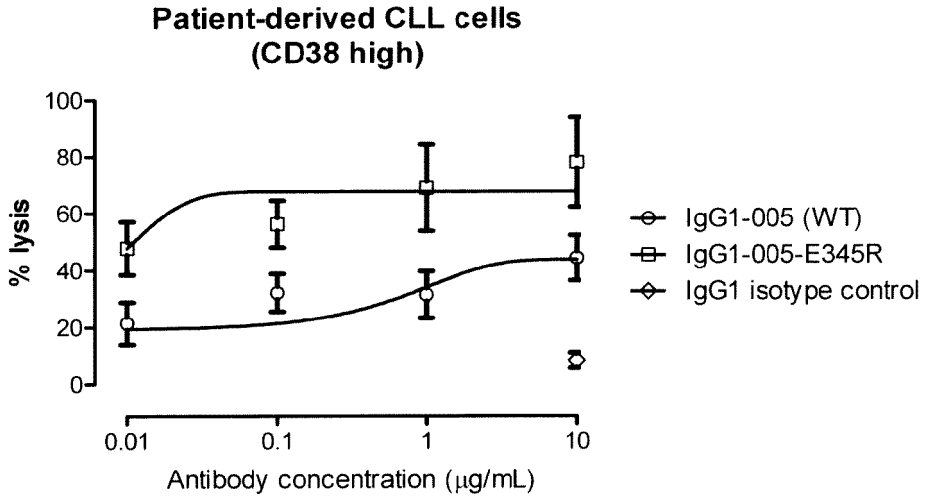

A
CDC on Daudi
% lysis
100
80
60
40
20
0
IgG1-005
IgG1-005-E345R (3 µg/mL)
IgG2-005
IgG2-005-E345R
IgG2-003
IgG2-003-E345R
IgG3-005
IgG3-005-E345R
IgG4-005
IgG4-005-E345R
B
CDC on Wien
% lysis
100
80
60
40
20
0
IgG1-005
IgG1-005-E345R (3 γ/mL)
IgG2-005
IgG2-005-E345R
IgG2-003
IgG2-003-E345R
IgG3-005
IgG3-005-E345R
IgG4-005
IgG4-005-E345R

Figure 20

A


Patient-derived CLL cells
(CD38 high)
% lysis
100
80
60
40
20
0
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-005 (WT)
IgG1-005-E345R
IgG1 isotype control

B

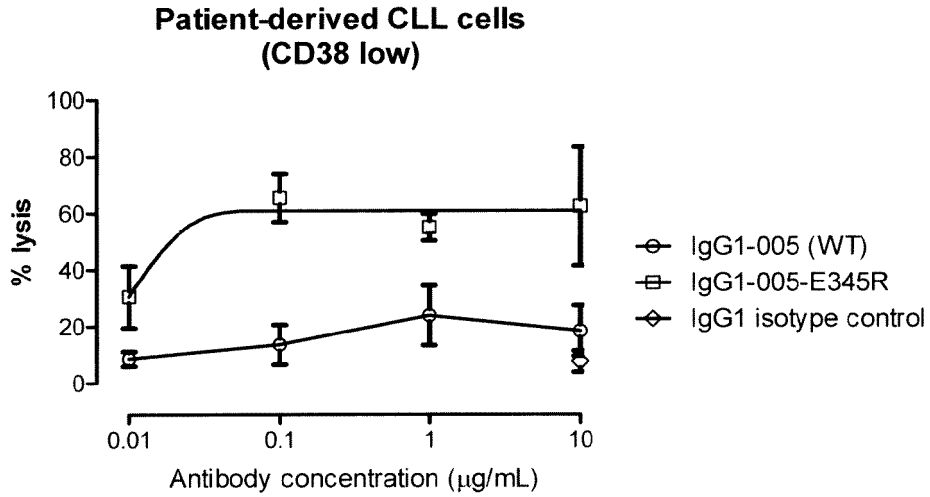

Patient-derived CLL cells
(CD38 low)
% lysis
100
80
60
40
20
0
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-005 (WT)
IgG1-005-E345R
IgG1 isotype control

Figure 21

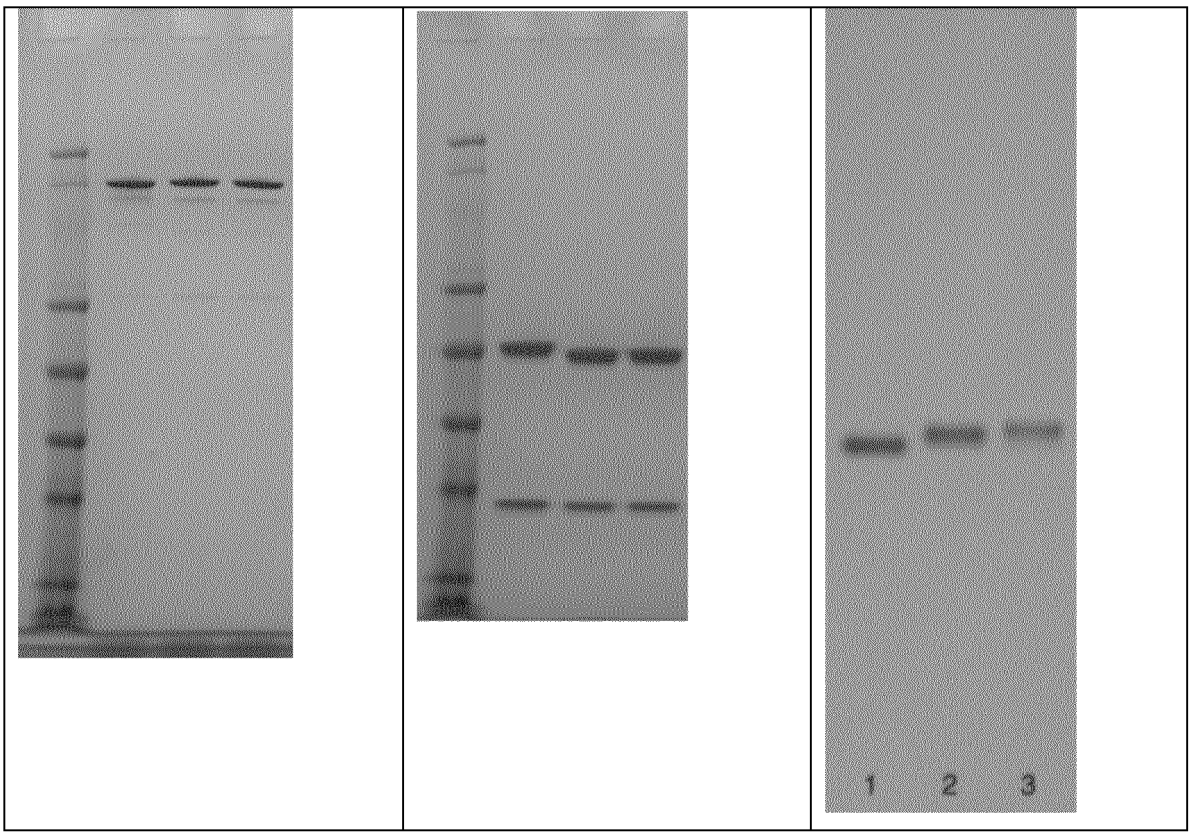


Figure 22

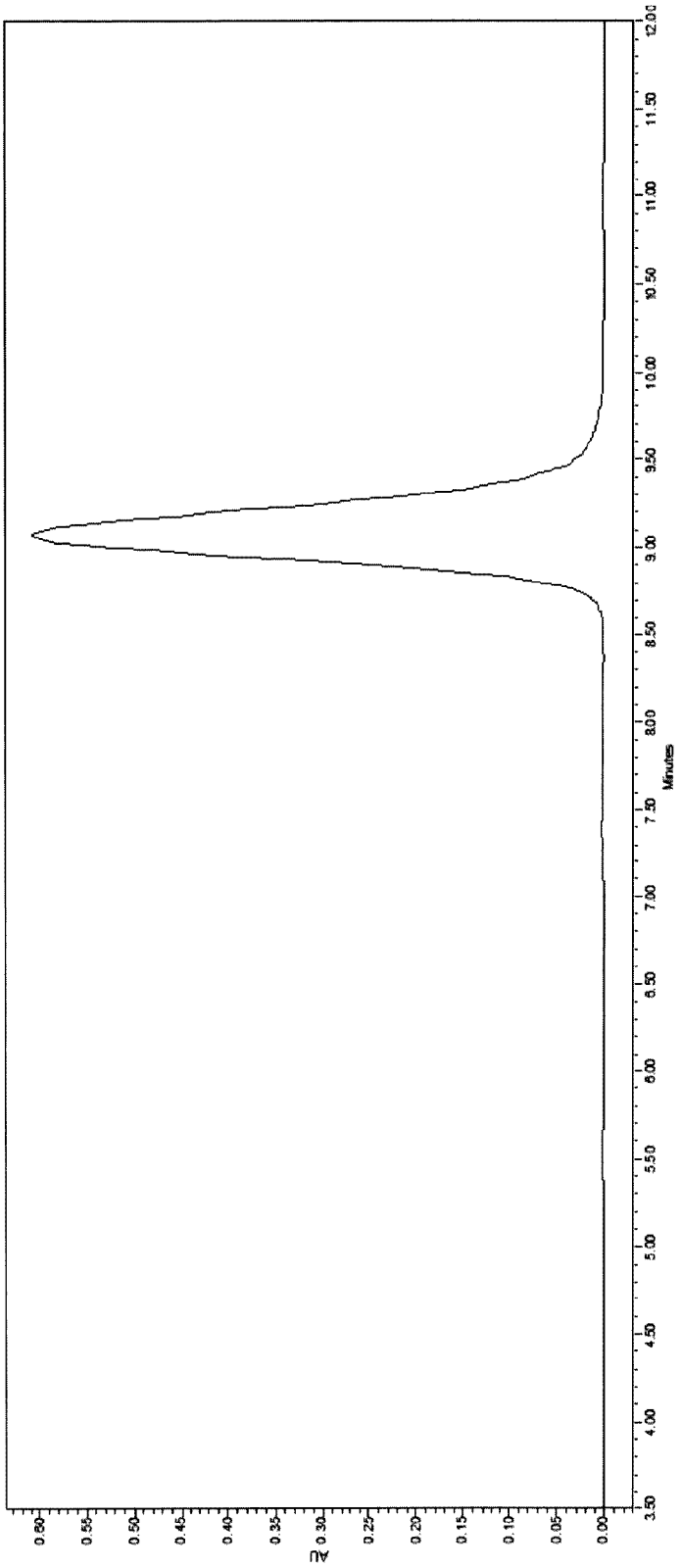


Figure 23

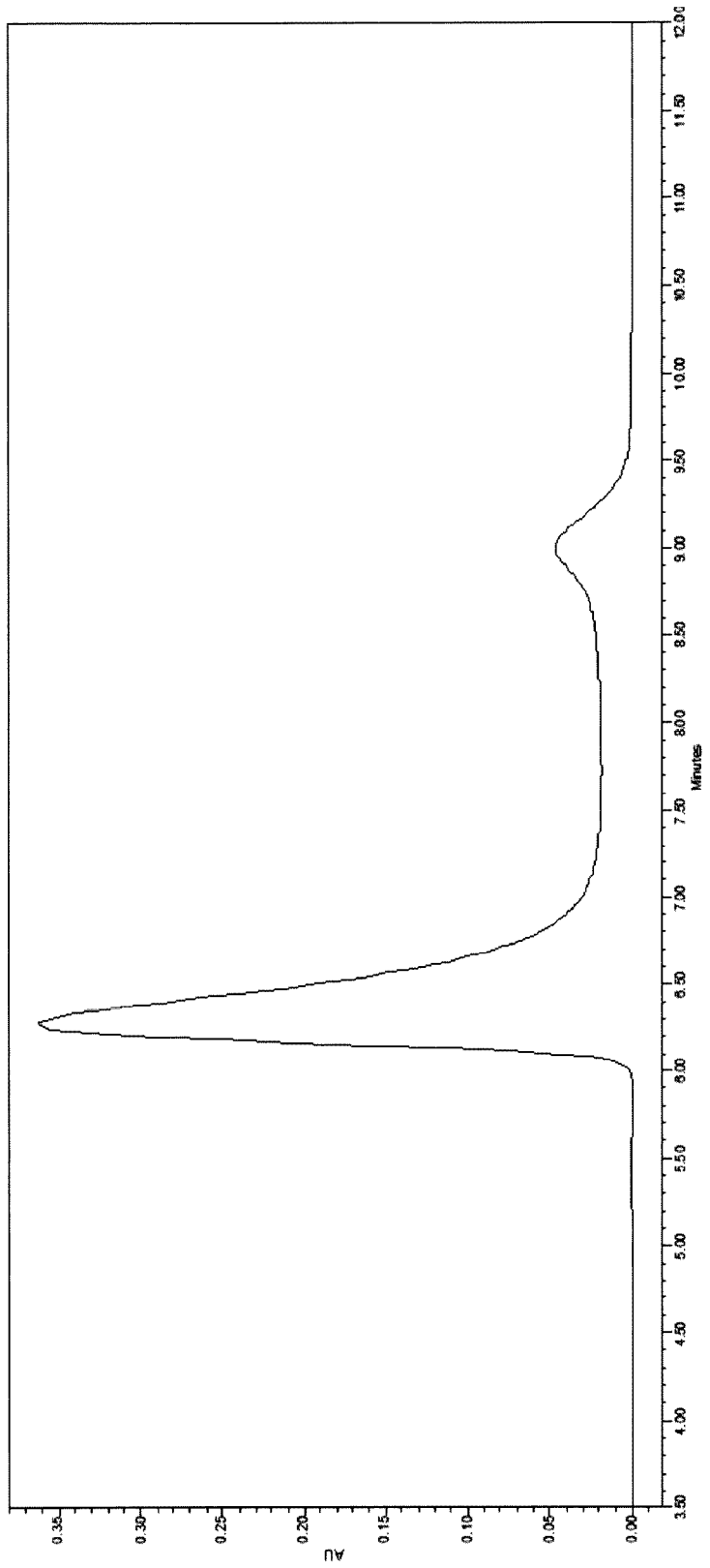

AU
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Minutes
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00
10.50
11.00
11.50
12.00

Figure 24

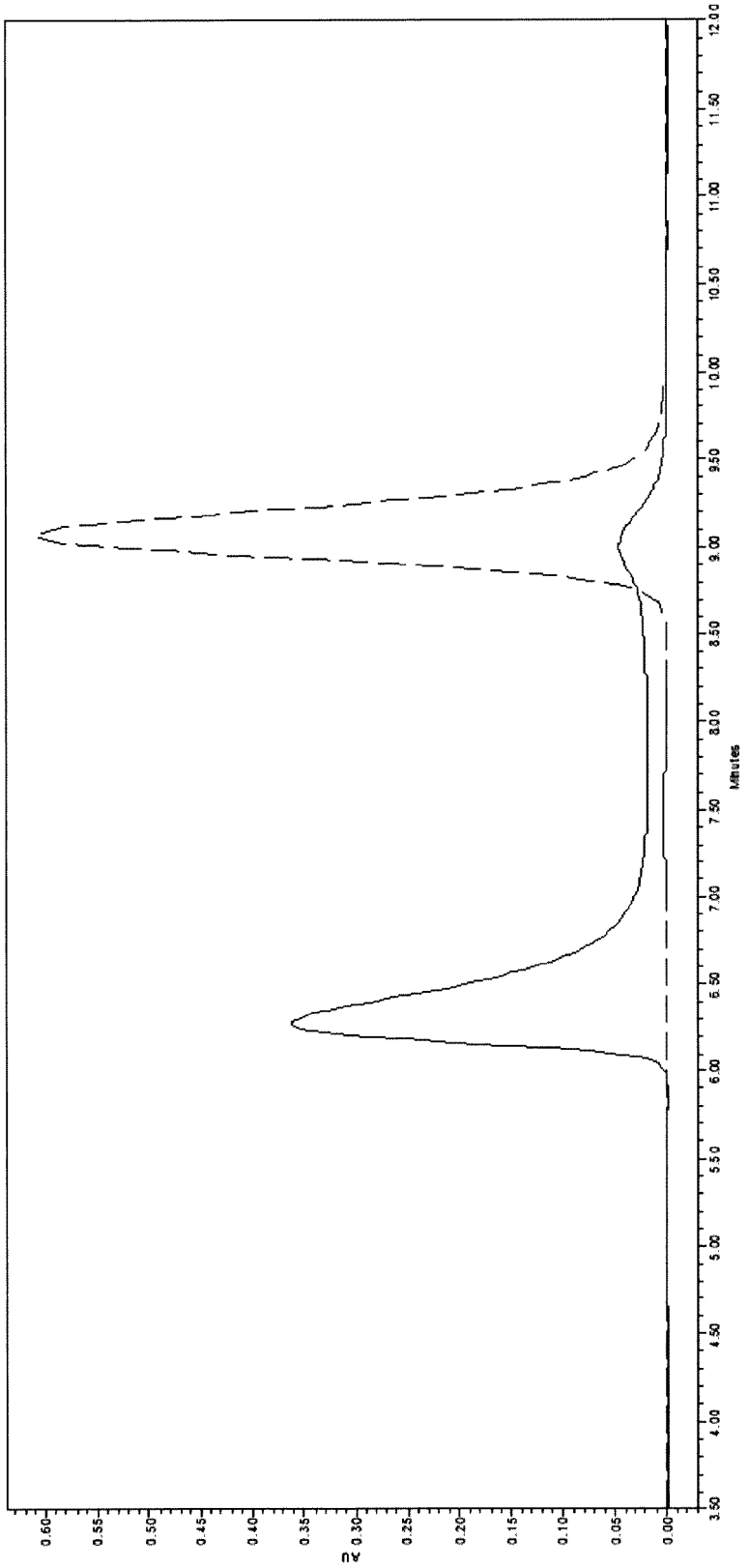

Minutes
3.50
4.00
4.50
5.00
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00
10.50
11.00
11.50
12.00
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00

Figure 25

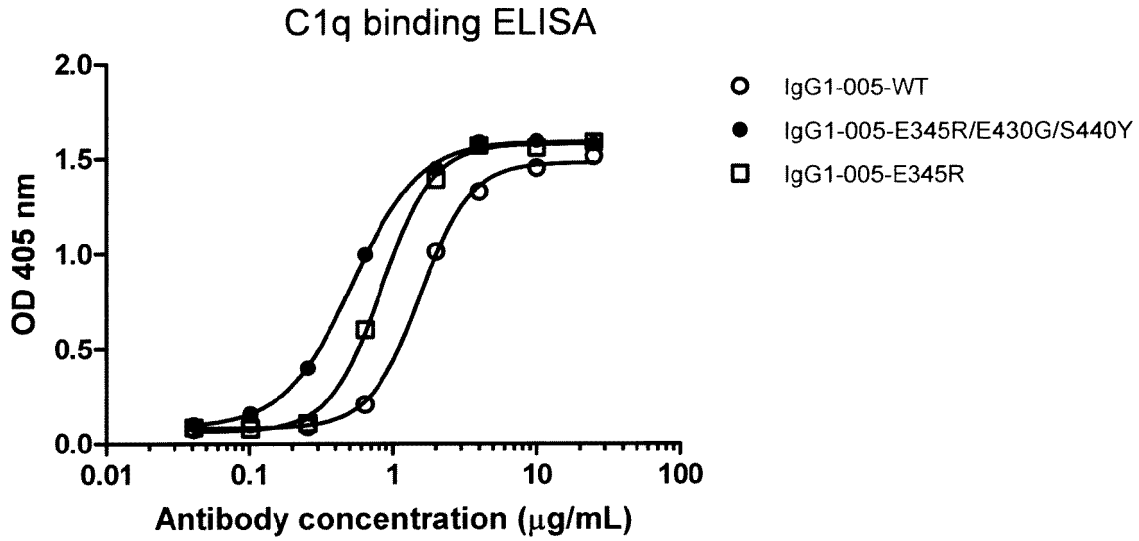


Figure 26

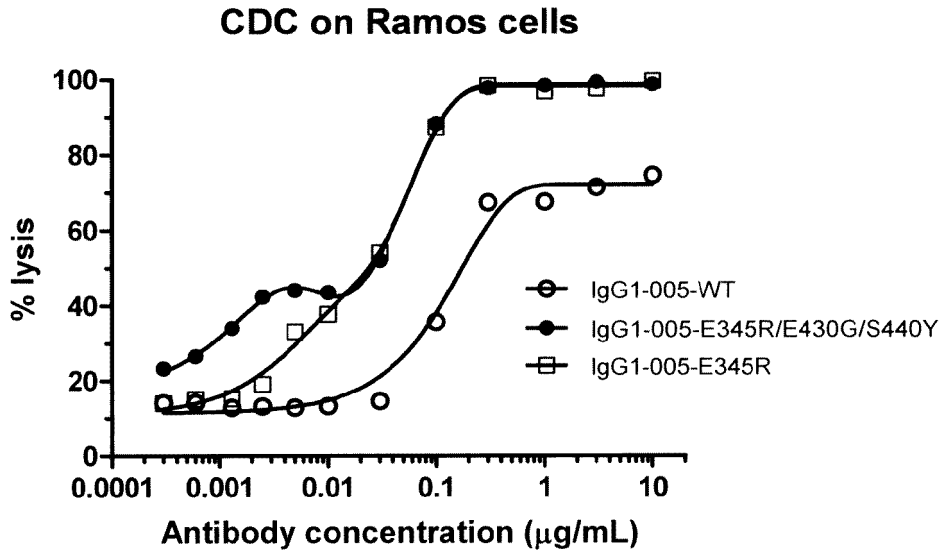


Figure 27

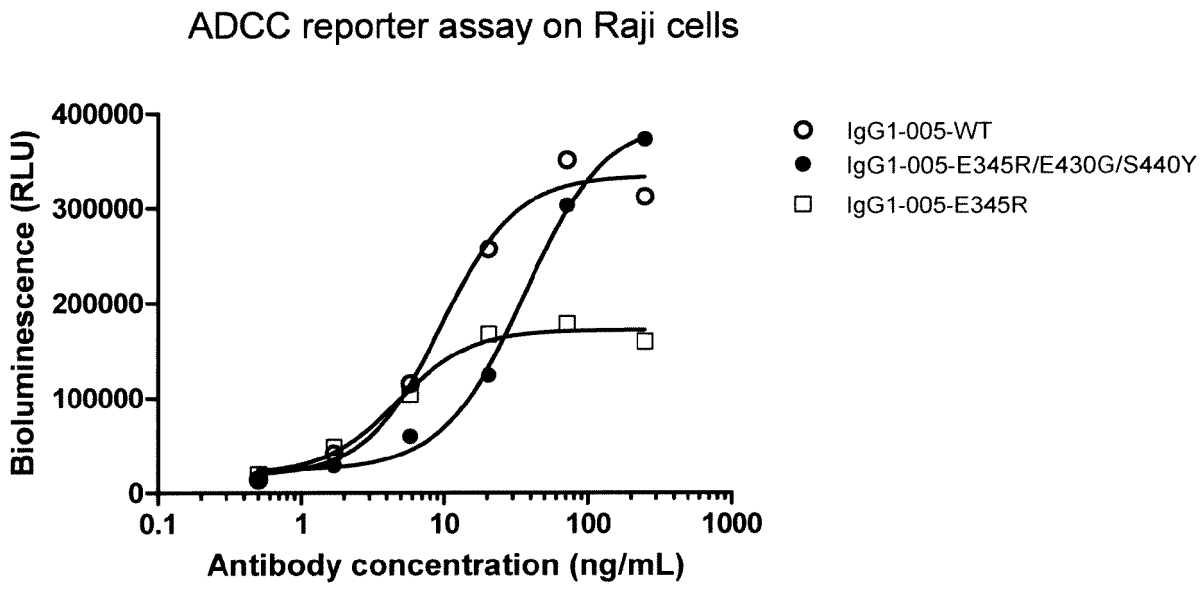


Figure 28

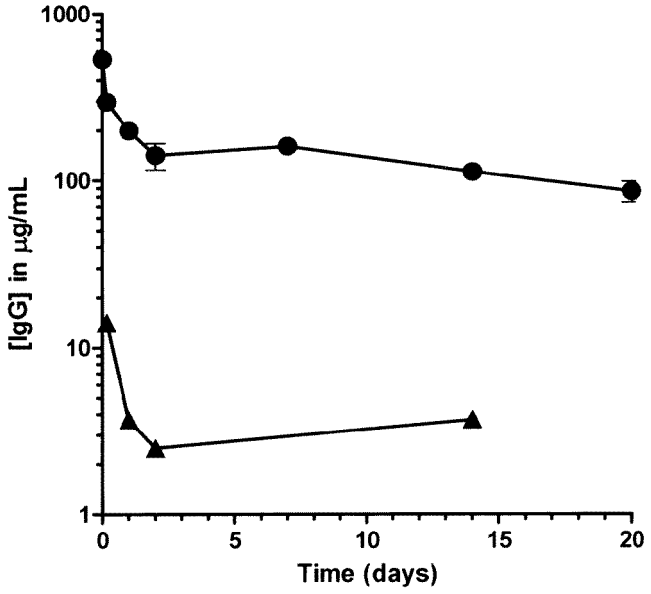


Figure 29

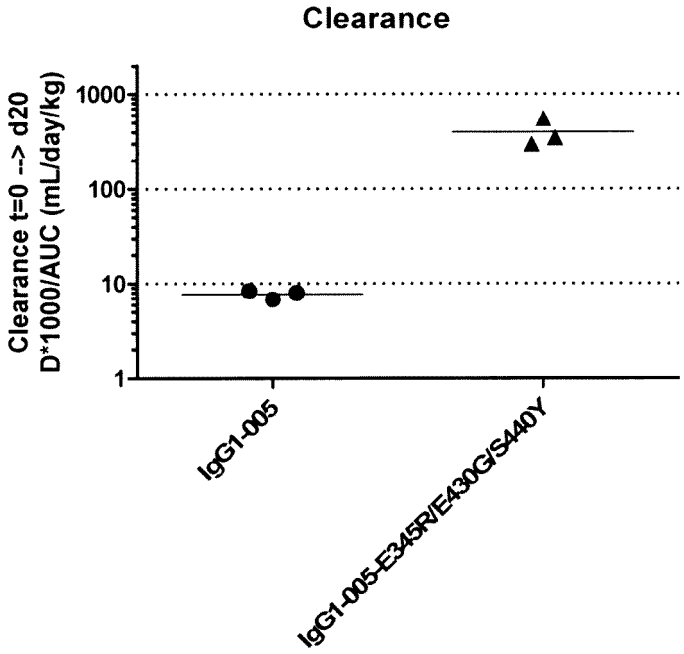

Clearance
Clearance t=0 --> d20
D*1000/AUC (mL/day/kg)
1000
100
10
1
IgG1-005
IgG1-005-E345R/E430G/S440Y

Figure 30

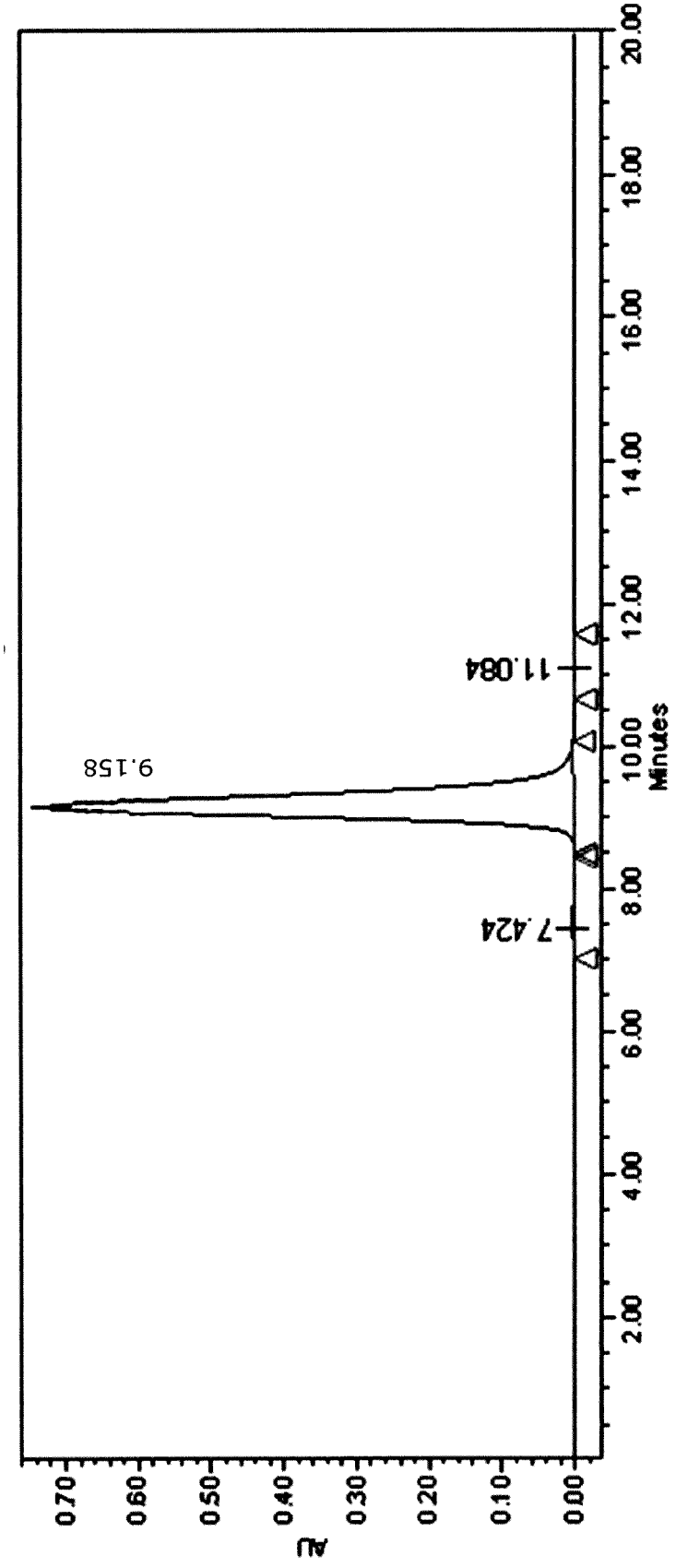

20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
Minutes
11.084
9.158
7.424
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
AU

Figure 31

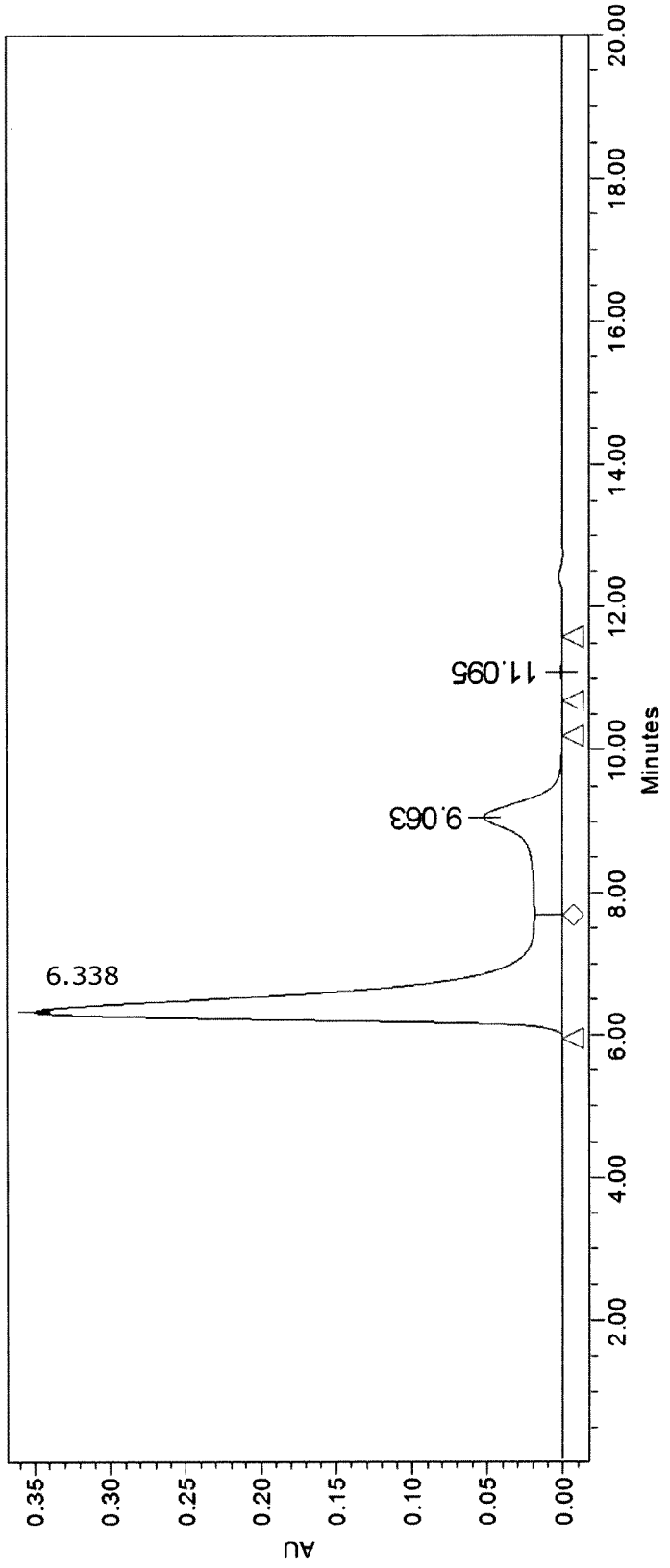

20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
Minutes
11.095
9.063
6.338
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
AU

Figure 32

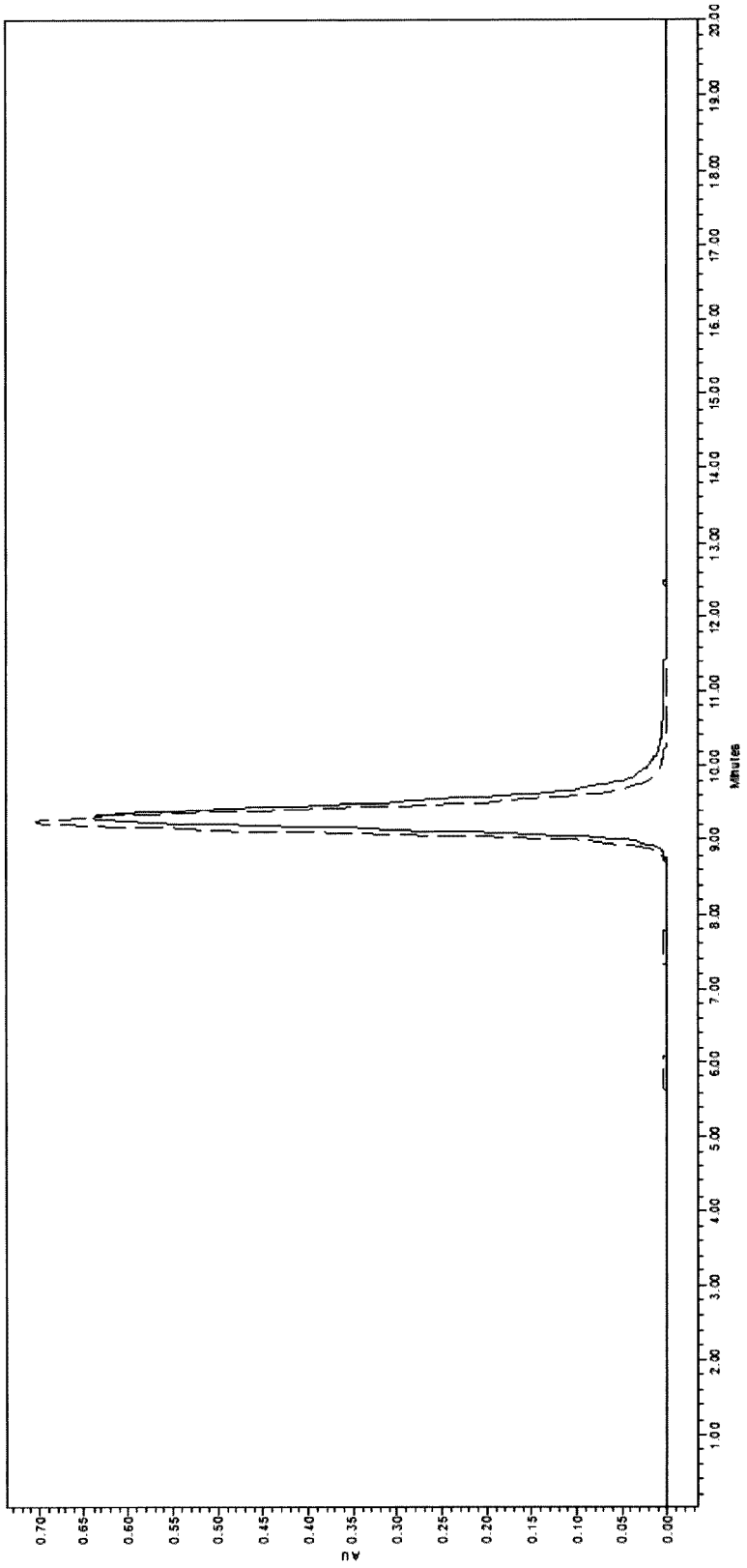


Figure 33

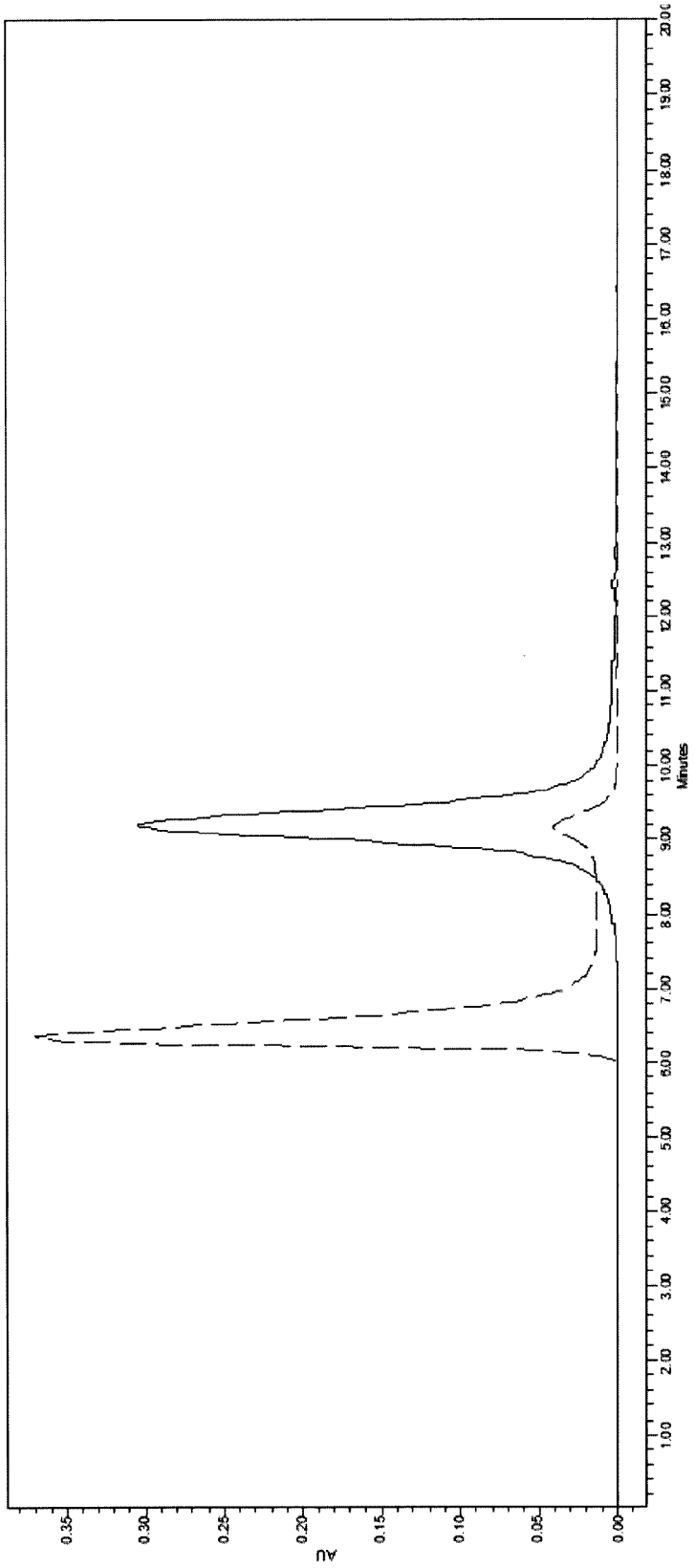

AU
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Minutes
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00
17.00
18.00
19.00

Figure 34A

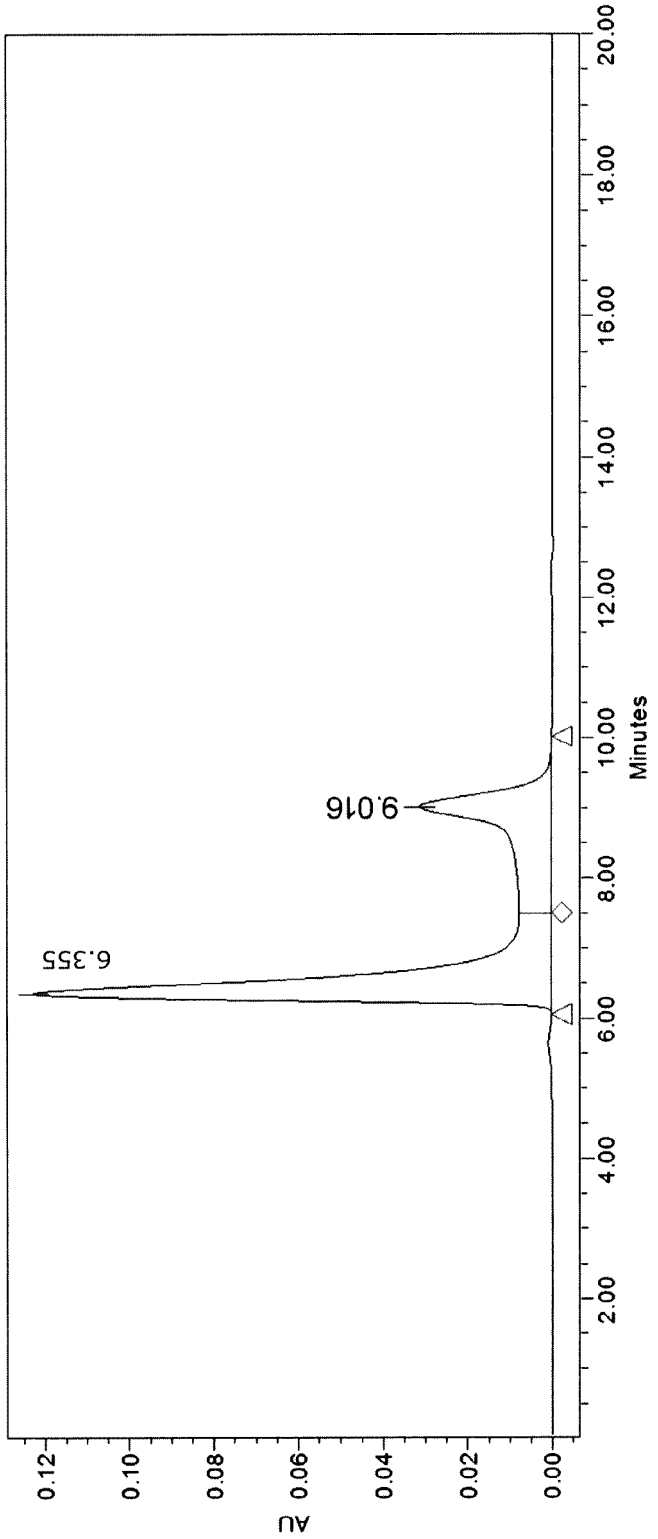

6.355
9.016
Minutes
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00
AU
0.00
0.02
0.04
0.06
0.08
0.10
0.12

Figure 34B

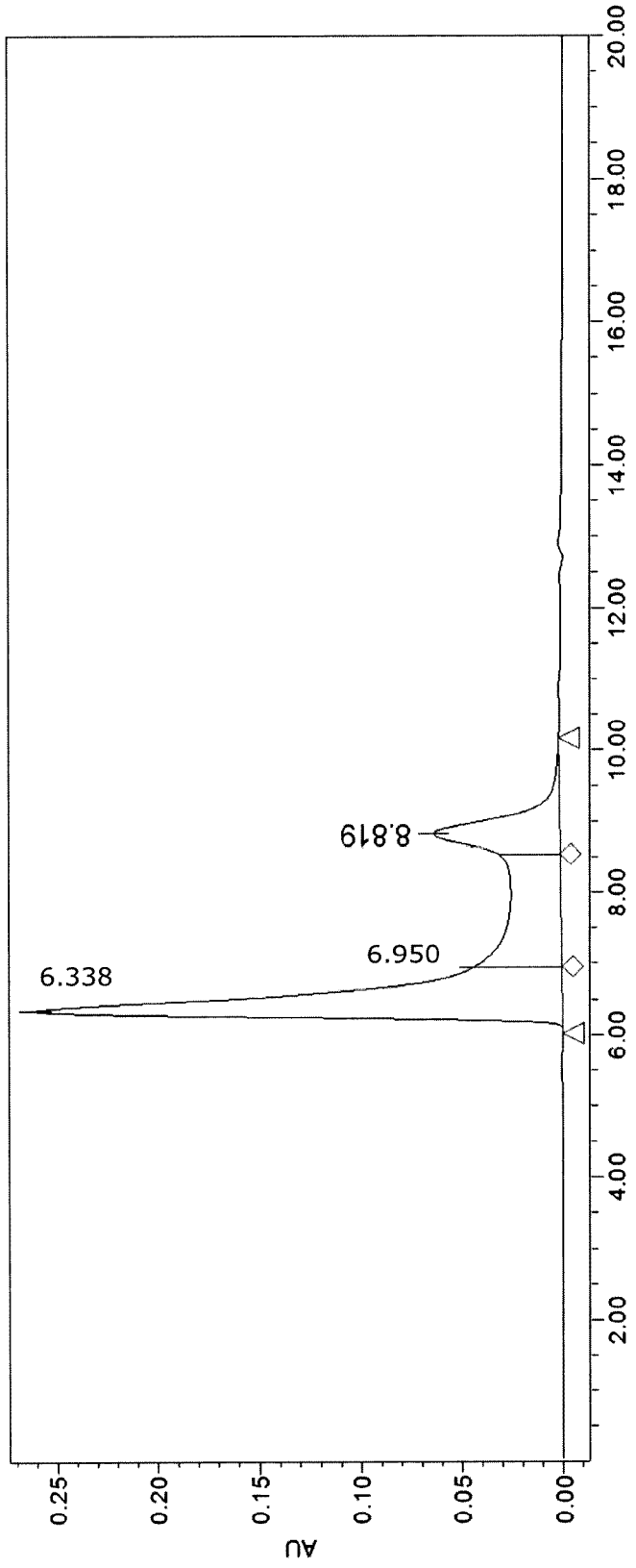

20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
8.819
6.950
6.338
0.25
0.20
0.15
0.10
0.05
0.00
AU

Figure 34C

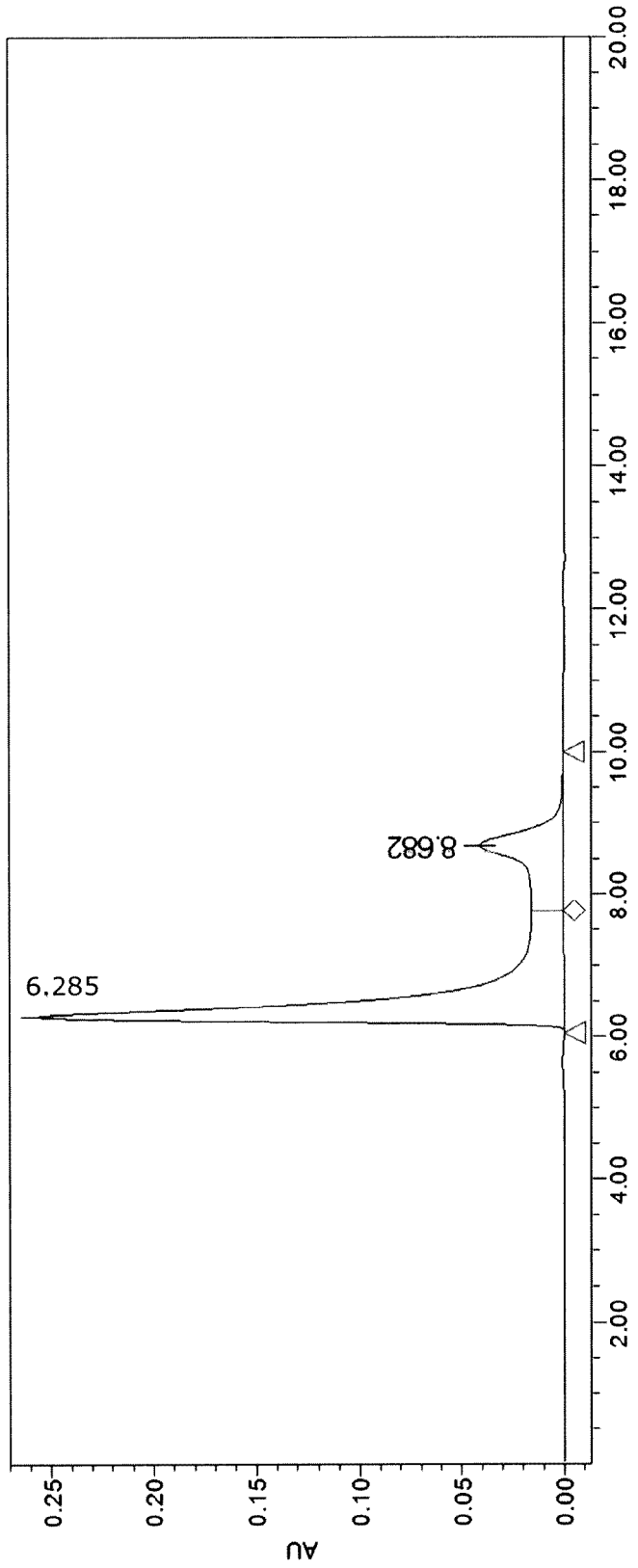

6.285
8.682
AU
0.25
0.20
0.15
0.10
0.05
0.00
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00

Figure 34D

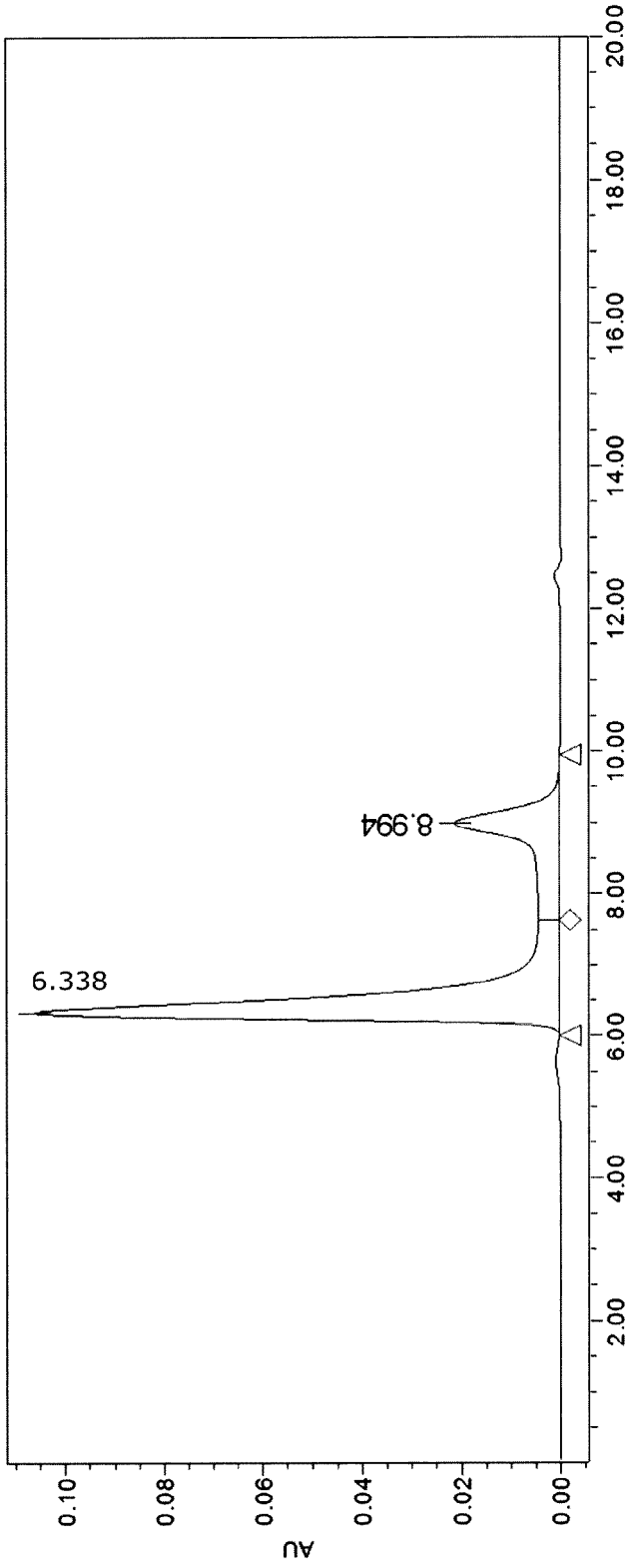
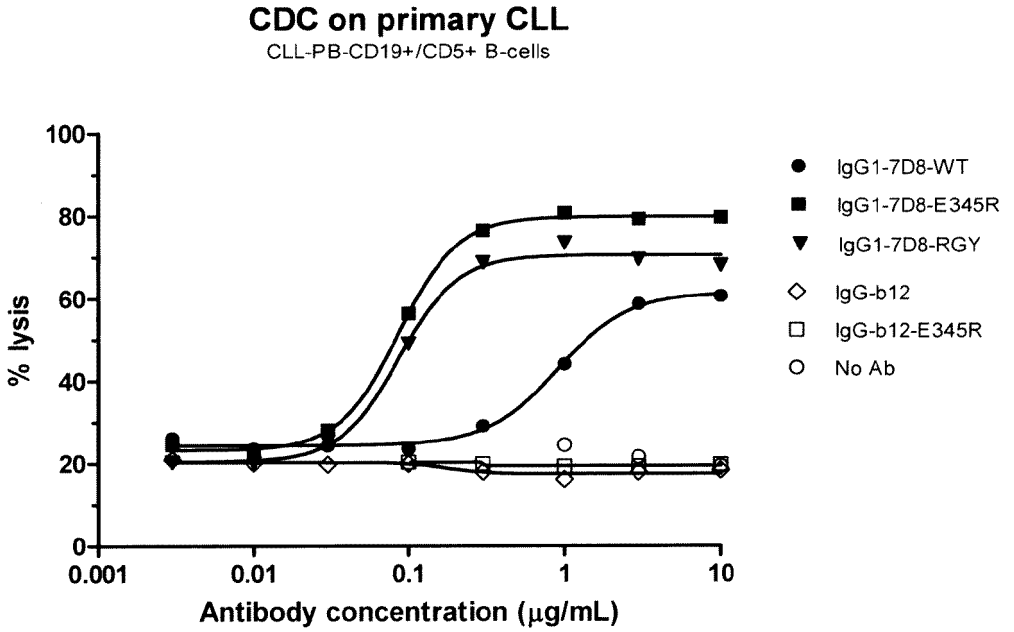

20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
8.994
6.338
0.10
0.08
0.06
0.04
0.02
0.00
AU

Figure 35

A


CDC on primary CLL
CLL-PB-CD19+/CD5+ B-cells
% lysis
100
80
60
40
20
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-7D8-WT
IgG1-7D8-E345R
IgG1-7D8-RGY
IgG-b12
IgG-b12-E345R
No Ab

B

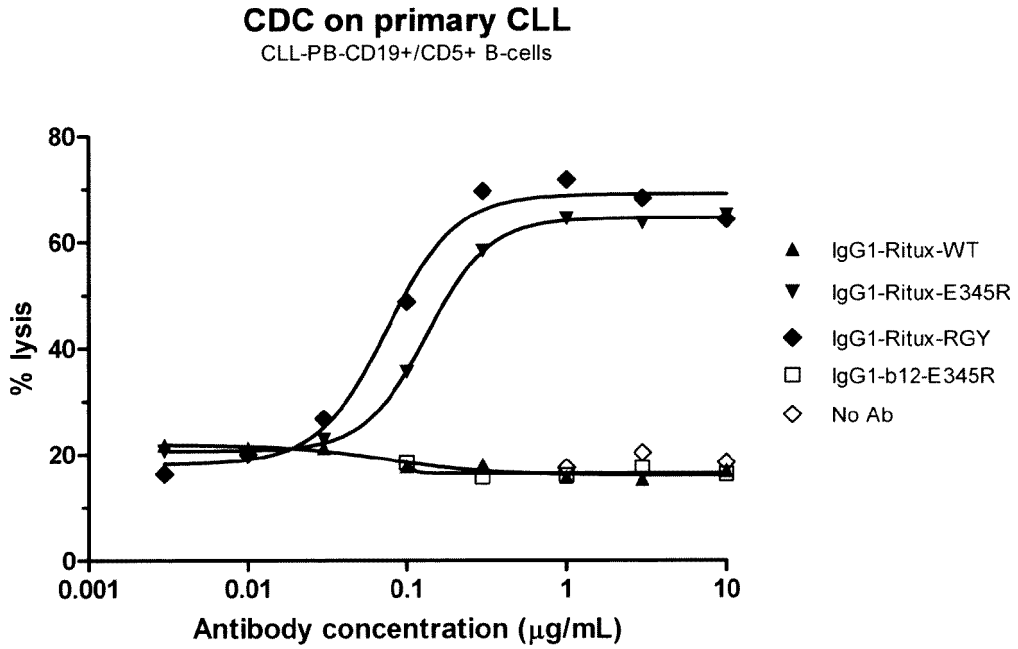

CDC on primary CLL
CLL-PB-CD19+/CD5+ B-cells
% lysis
80
60
40
20
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-Ritux-WT
IgG1-Ritux-E345R
IgG1-Ritux-RGY
IgG1-b12-E345R
No Ab

Figure 36A

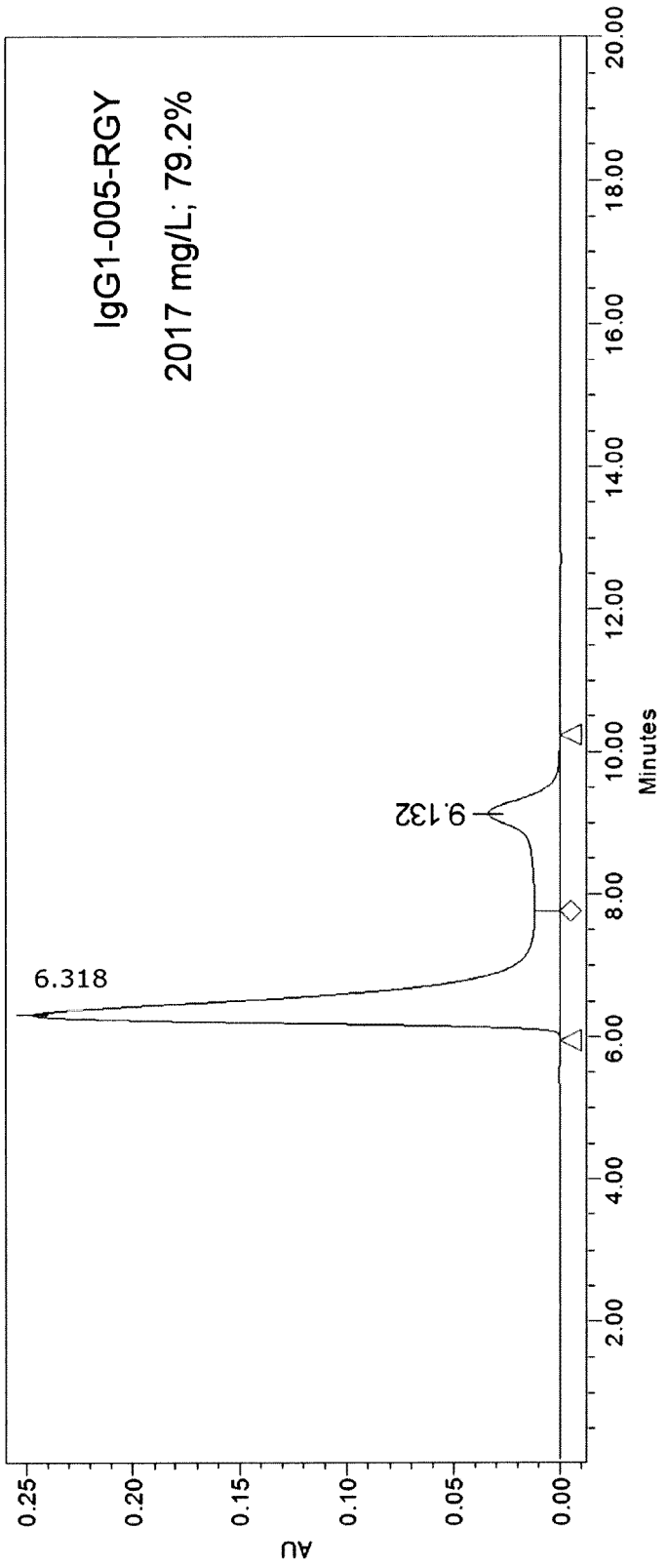

IgG1-005-RGY
2017 mg/L; 79.2%
6.318
9.132
Minutes
AU
0.25
0.20
0.15
0.10
0.05
0.00
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00

Figure 36B

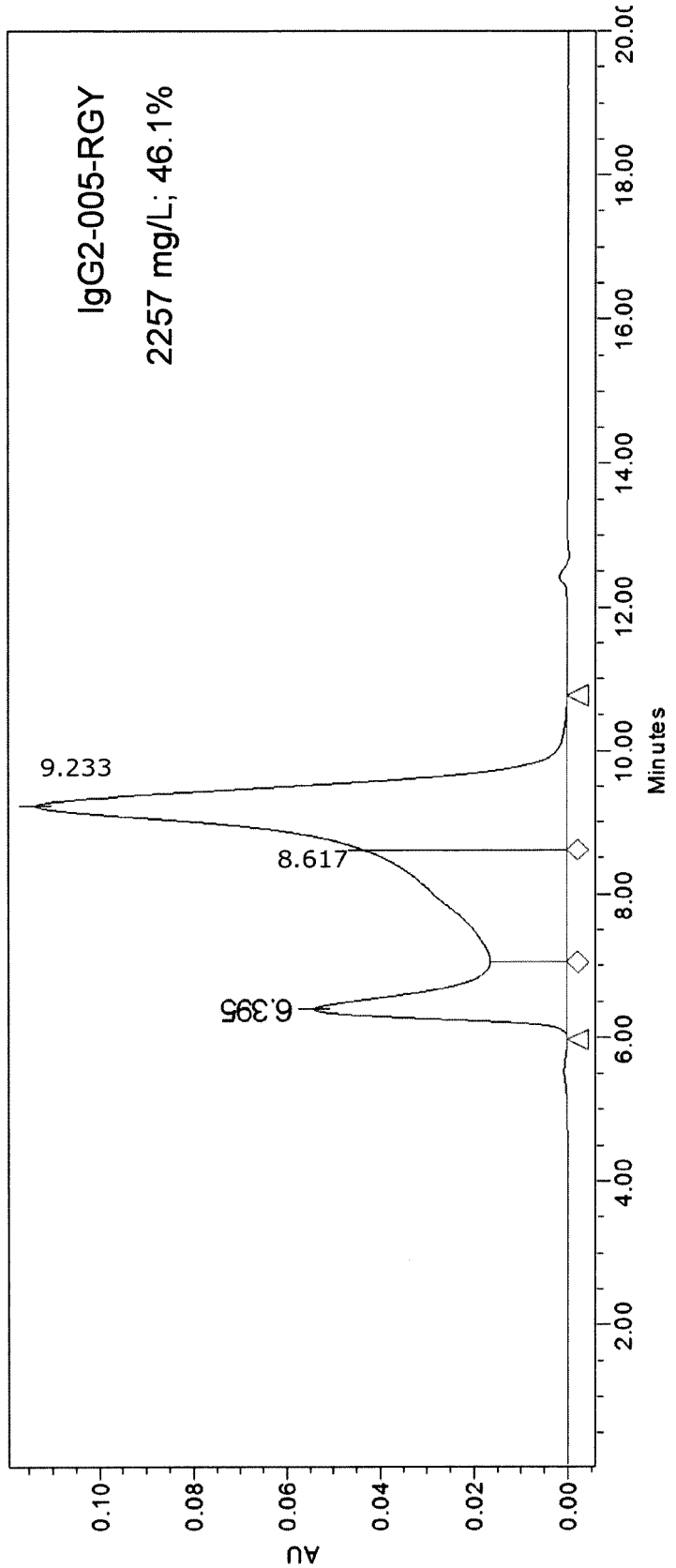

IgG2-005-RGY
2257 mg/L; 46.1%
9.233
8.617
6.395
Minutes
AU
0.00
0.02
0.04
0.06
0.08
0.10
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00

Figure 36C

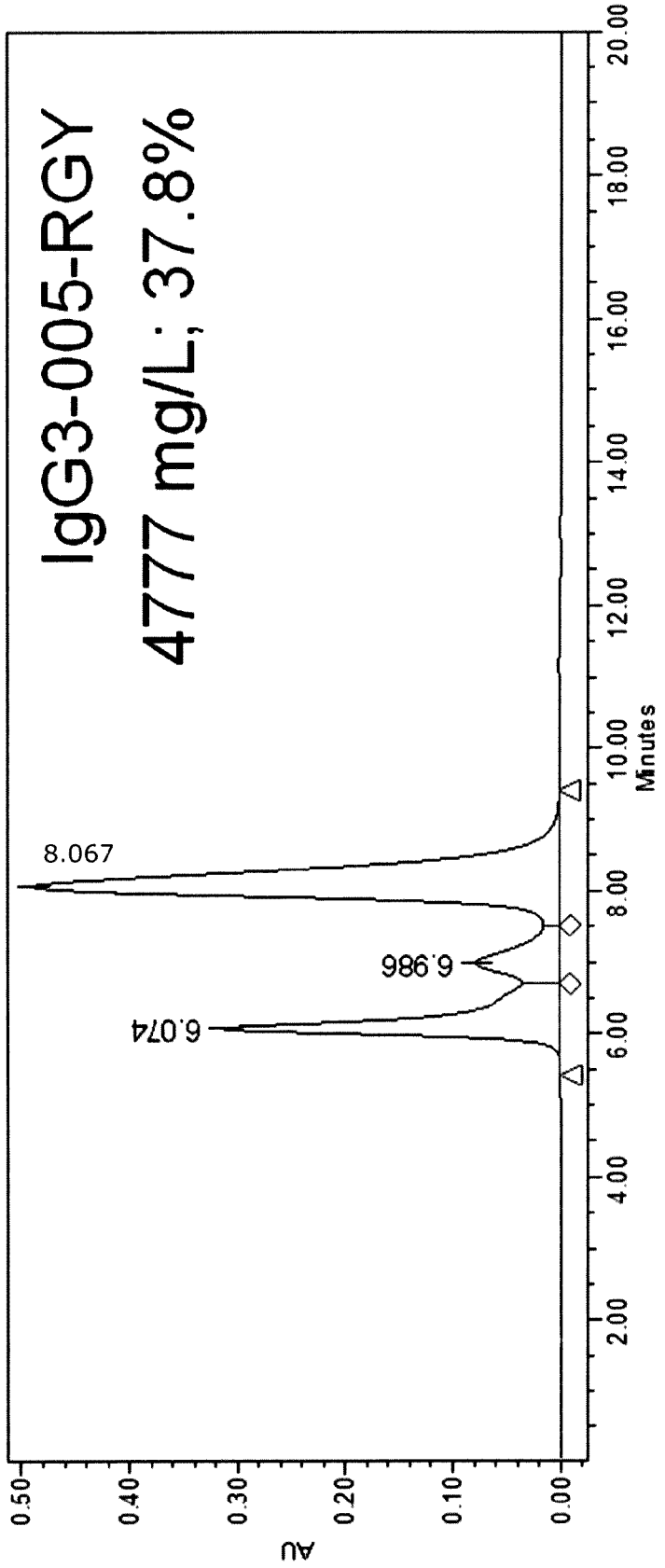

IgG3-005-RGY
4777 mg/L; 37.8%
8.067
6.986
6.074
Minutes
AU
0.00
0.10
0.20
0.30
0.40
0.50
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00

Figure 36D

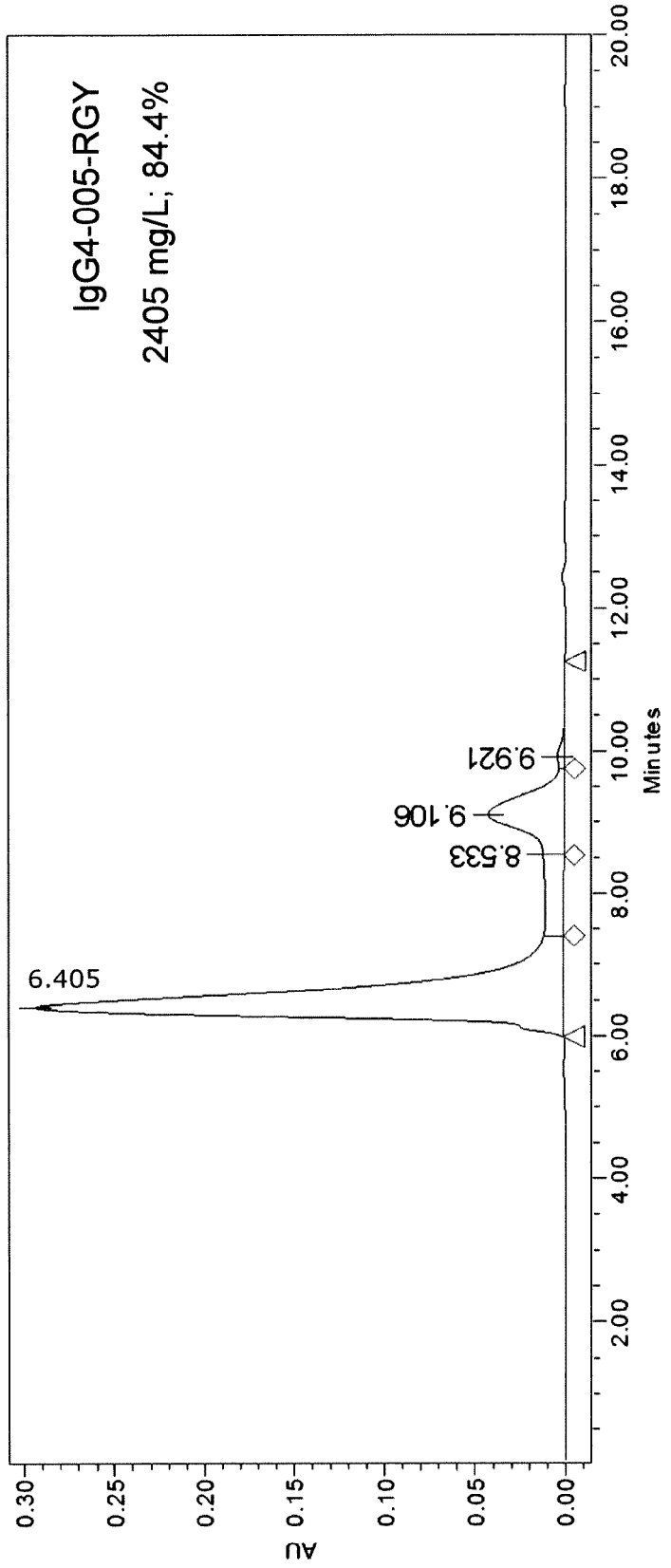

IgG4-005-RGY
2405 mg/L; 84.4%
6.405
8.533
9.106
9.921
Minutes
AU
0.00
0.05
0.10
0.15
0.20
0.25
0.30
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00

Figure 37

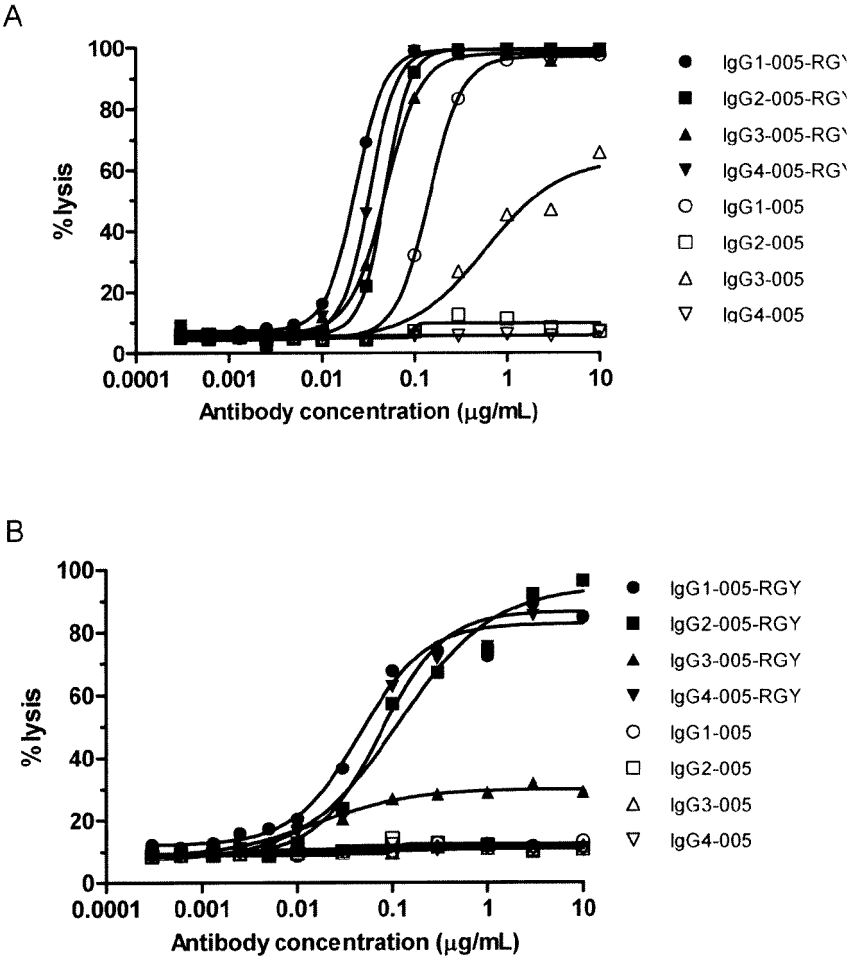

A
100
80
60
40
20
0
% lysis
0.0001
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-005-RGY
IgG2-005-RGY
IgG3-005-RGY
IgG4-005-RGY
IgG1-005
IgG2-005
IgG3-005
IgG4-005
B
100
80
60
40
20
0
% lysis
0.0001
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-005-RGY
IgG2-005-RGY
IgG3-005-RGY
IgG4-005-RGY
IgG1-005
IgG2-005
IgG3-005
IgG4-005

Figure 38A

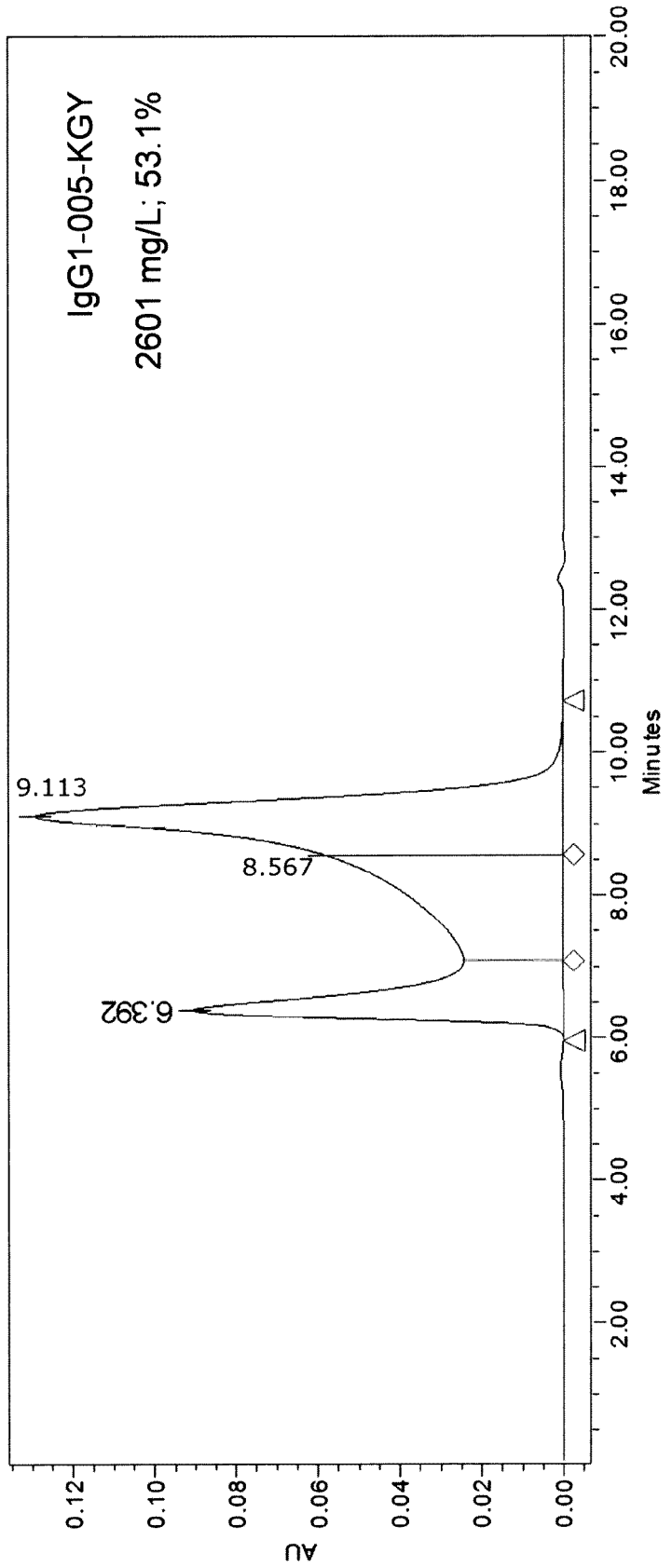

IgG1-005-KGY
2601 mg/L; 53.1%
9.113
8.567
6.392
Minutes
AU
0.00
0.02
0.04
0.06
0.08
0.10
0.12
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00

Figure 38B

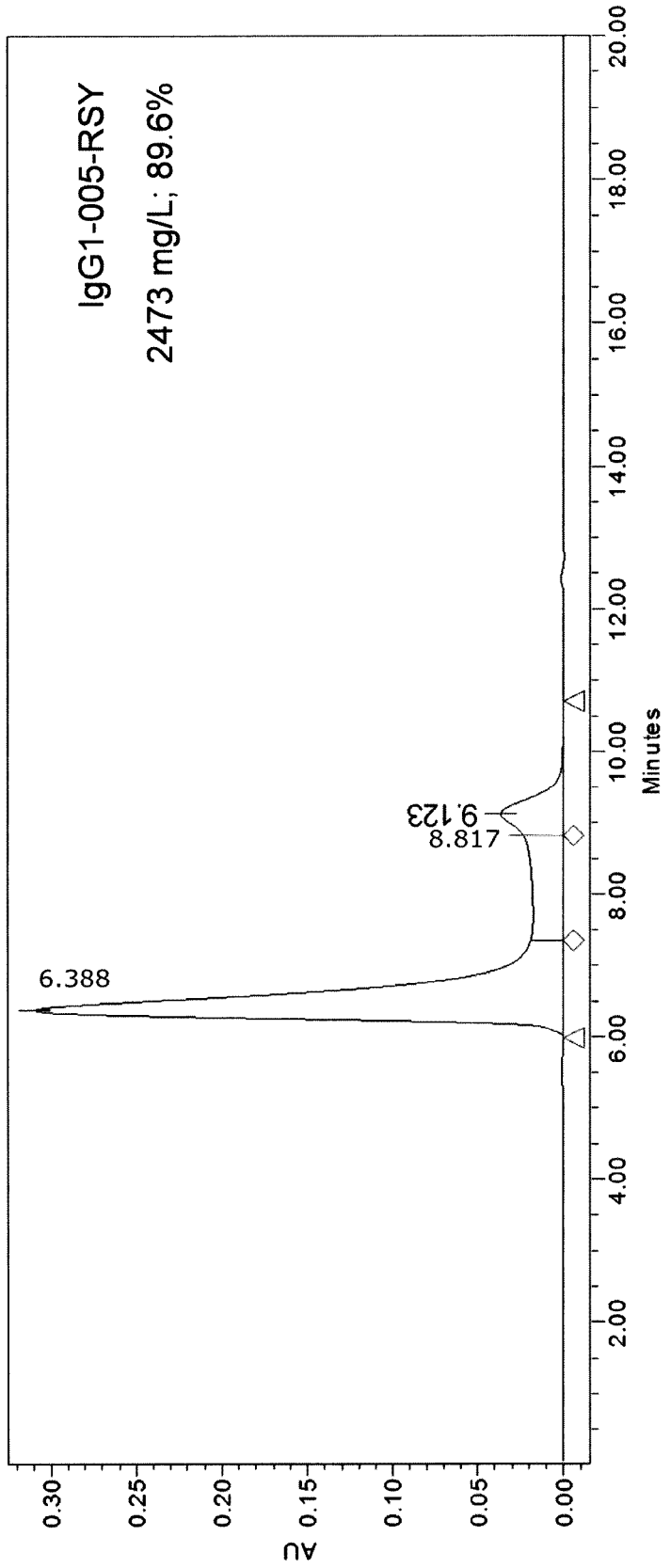

IgG1-005-RSY
2473 mg/L; 89.6%
6.388
8.817
9.123
Minutes
AU
0.00
0.05
0.10
0.15
0.20
0.25
0.30
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00

Figure 38C

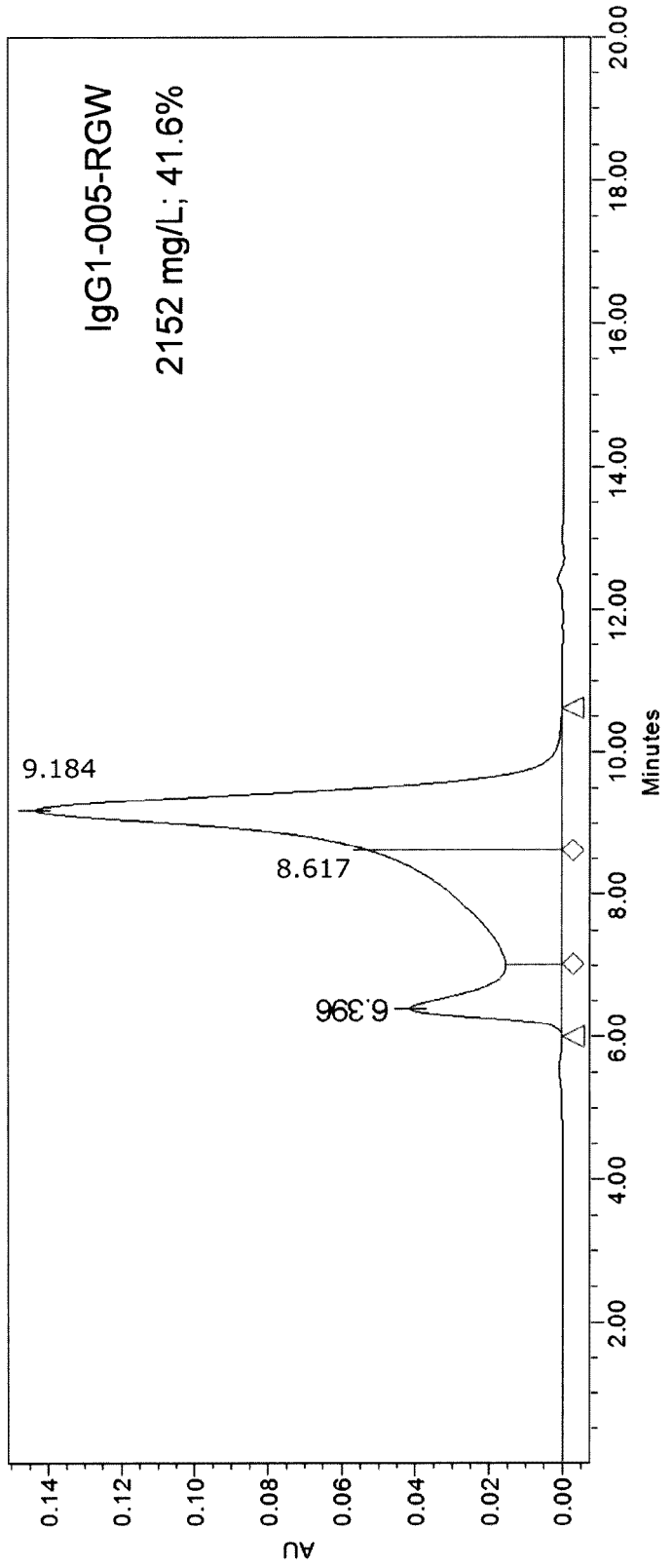

IgG1-005-RGW
2152 mg/L; 41.6%
9.184
8.617
6.396
AU
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00
Minutes

Figure 38D

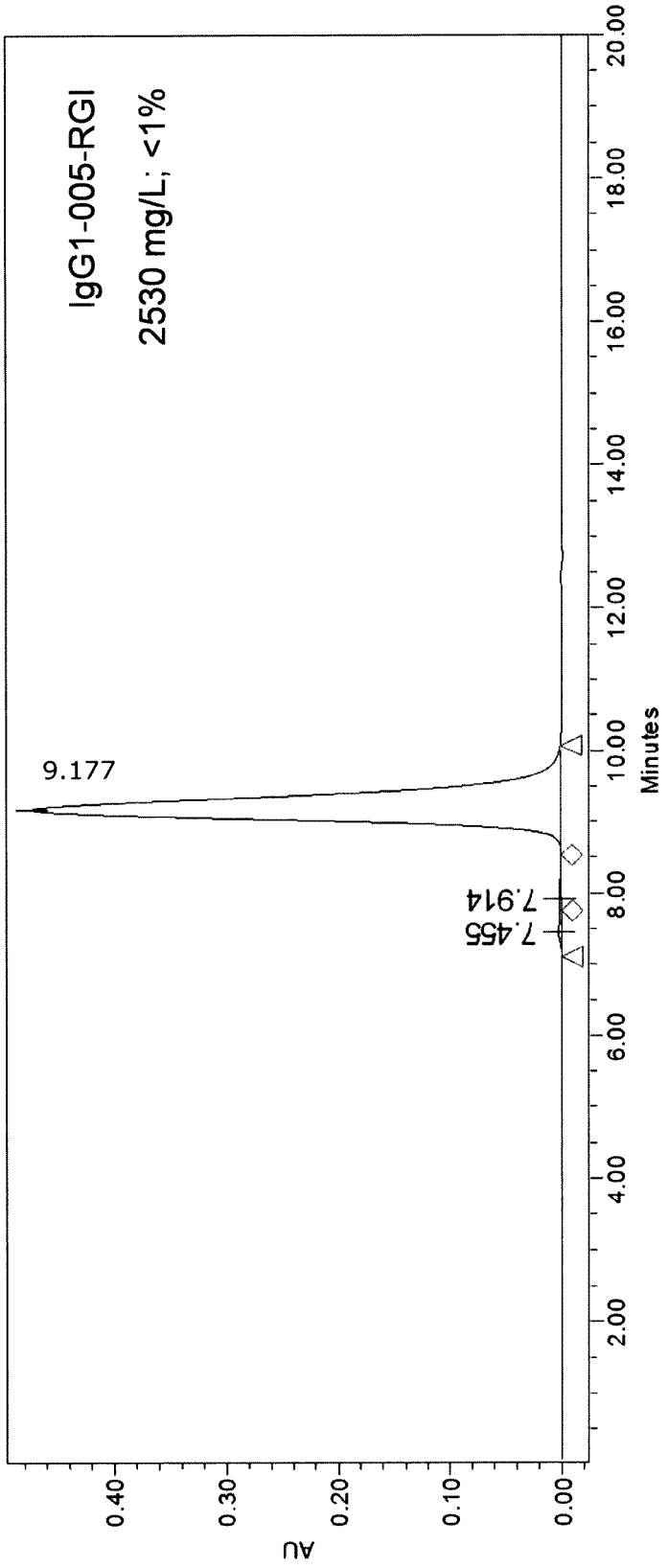
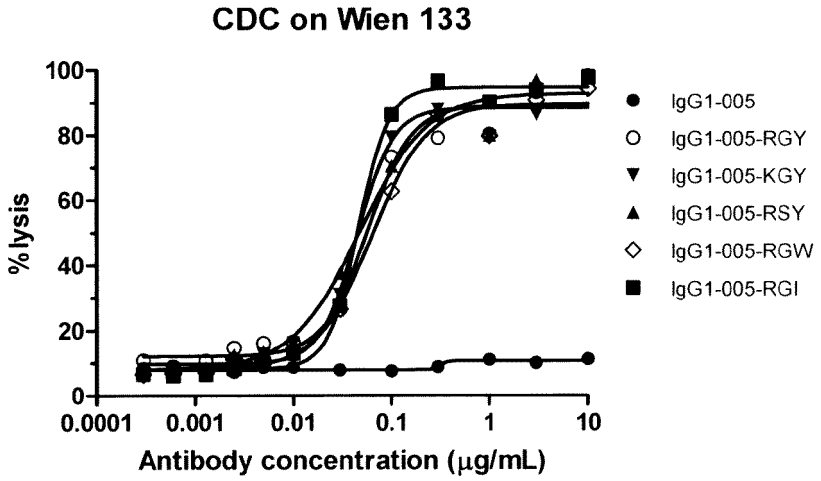

IgG1-005-RGI
2530 mg/L; <1%
9.177
7.914
7.455
Minutes
AU
0.00
0.10
0.20
0.30
0.40
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00

Figure 39

A


CDC on Wien 133
% lysis
100
80
60
40
20
0
0.0001
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-005
IgG1-005-RGY
IgG1-005-KGY
IgG1-005-RSY
IgG1-005-RGW
IgG1-005-RGI

B

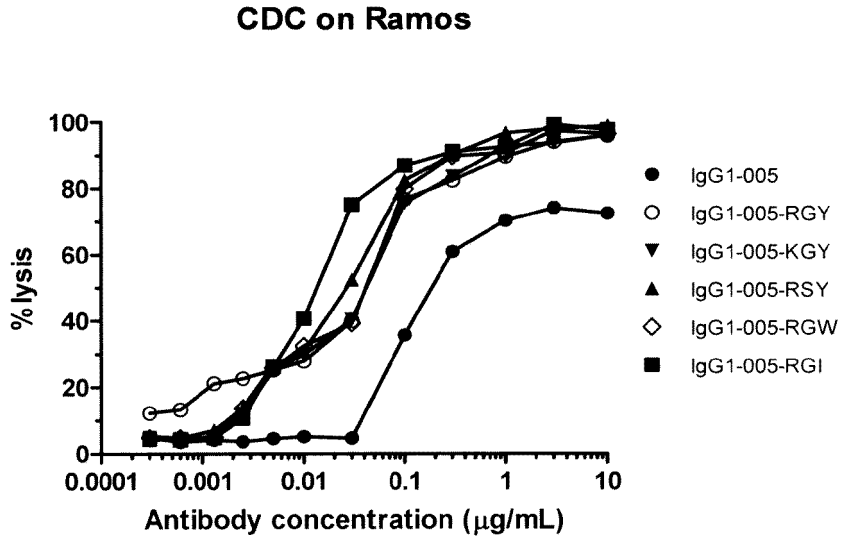

CDC on Ramos
% lysis
100
80
60
40
20
0
0.0001
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-005
IgG1-005-RGY
IgG1-005-KGY
IgG1-005-RSY
IgG1-005-RGW
IgG1-005-RGI

Figure 40

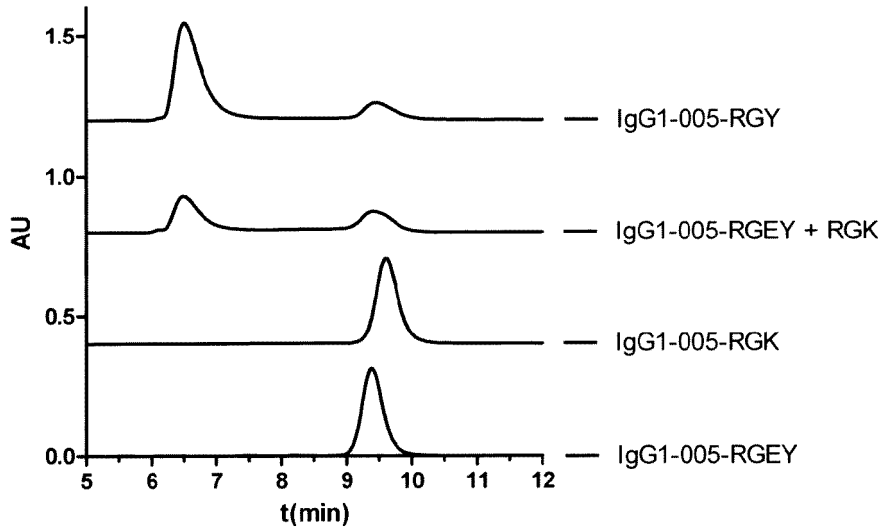


Figure 41

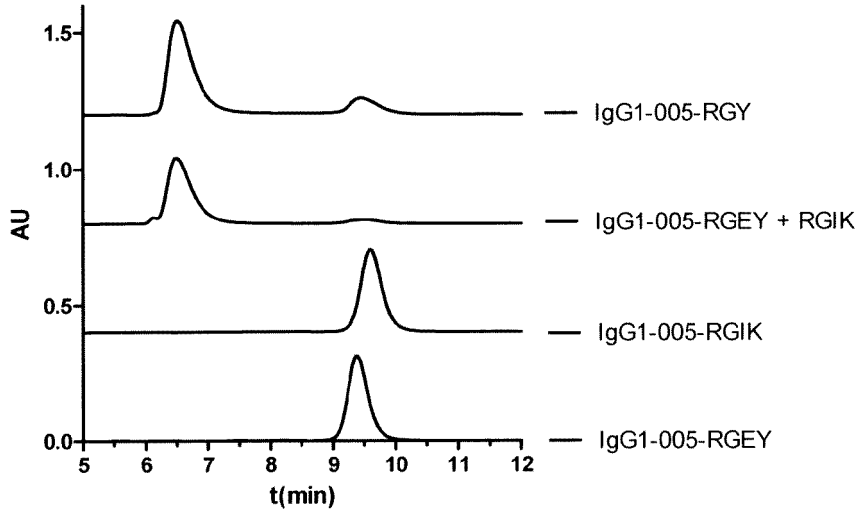


Figure 42

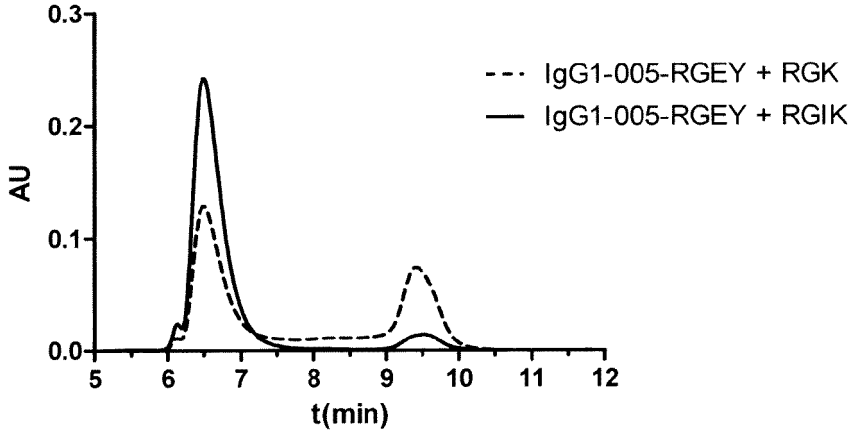

0.3
0.2
0.1
0.0
AU
5
6
7
8
9
10
11
12
t(min)
IgG1-005-RGEY + RGK
IgG1-005-RGEY + RGIK

Figure 43

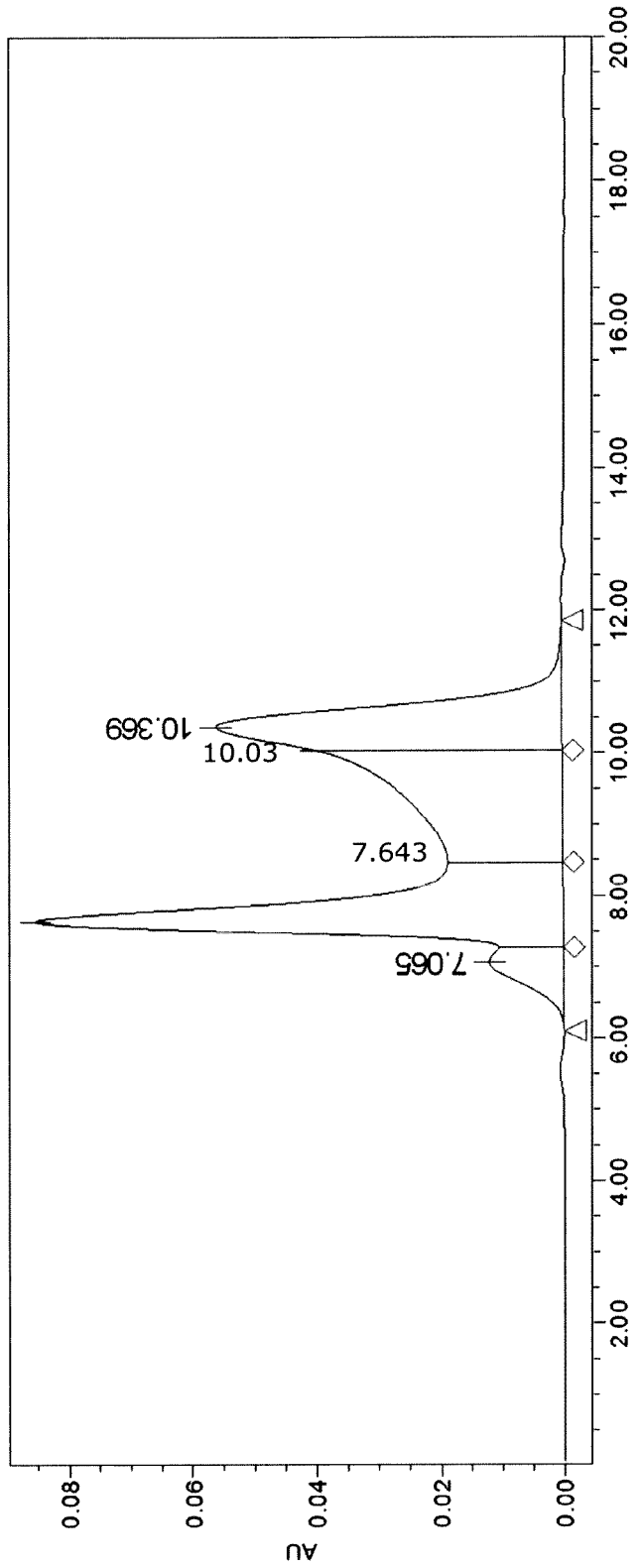
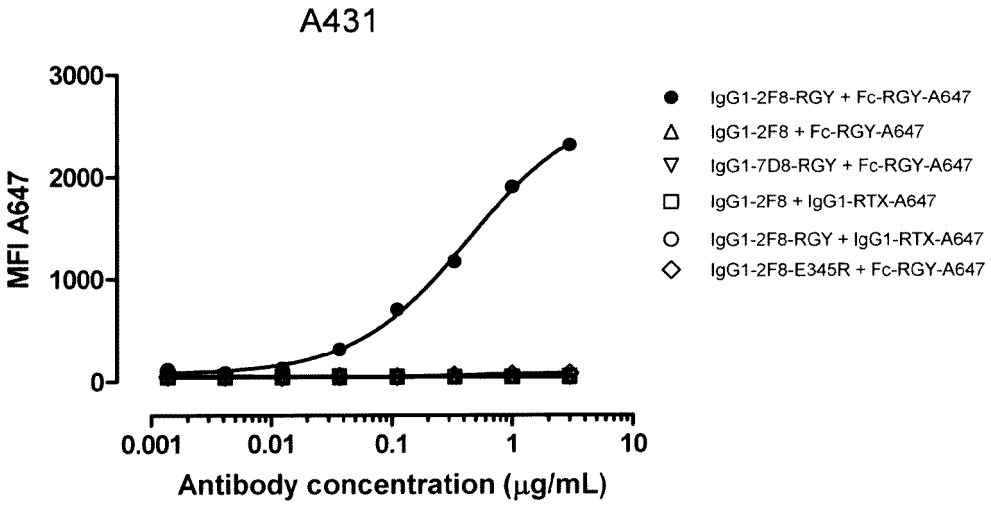

10.369
10.03
7.643
7.065
AU
0.00
0.02
0.04
0.06
0.08
2.00
4.00
6.00
8.00
10.00
12.00
14.00
16.00
18.00
20.00

Figure 44

A


A431
MFI A647
3000
2000
1000
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-2F8-RGY + Fc-RGY-A647
IgG1-2F8 + Fc-RGY-A647
IgG1-7D8-RGY + Fc-RGY-A647
IgG1-2F8 + IgG1-RTX-A647
IgG1-2F8-RGY + IgG1-RTX-A647
IgG1-2F8-E345R + Fc-RGY-A647

B

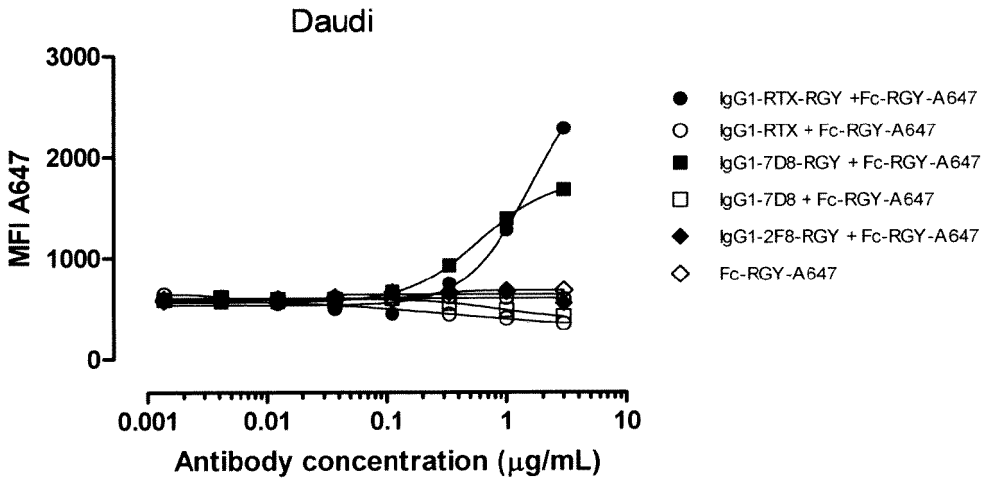
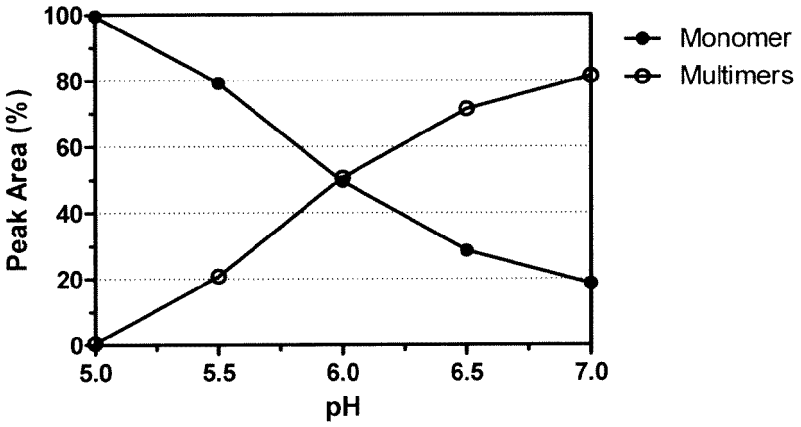
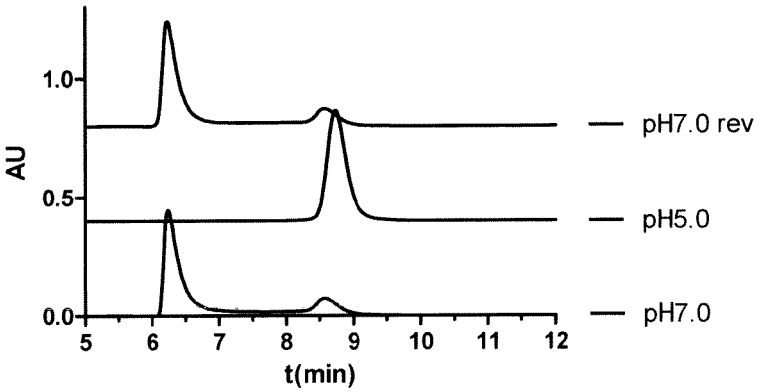

Daudi
MFI A647
3000
2000
1000
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-RTX-RGY +Fc-RGY-A647
IgG1-RTX + Fc-RGY-A647
IgG1-7D8-RGY + Fc-RGY-A647
IgG1-7D8 + Fc-RGY-A647
IgG1-2F8-RGY + Fc-RGY-A647
Fc-RGY-A647

Figure 45



A



B

Figure 46

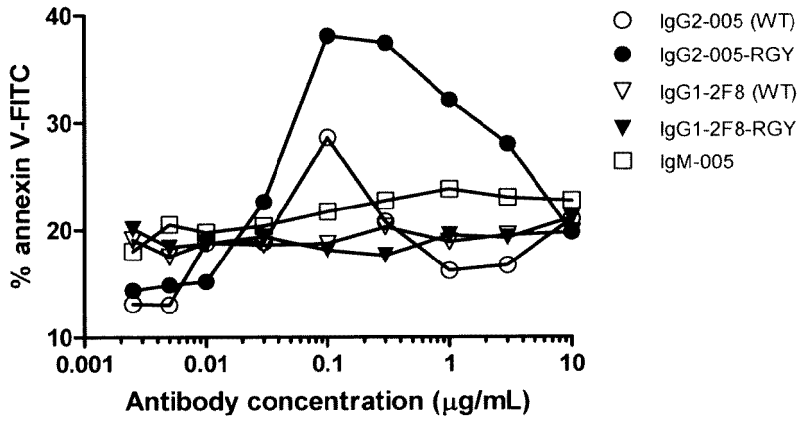


Figure 47

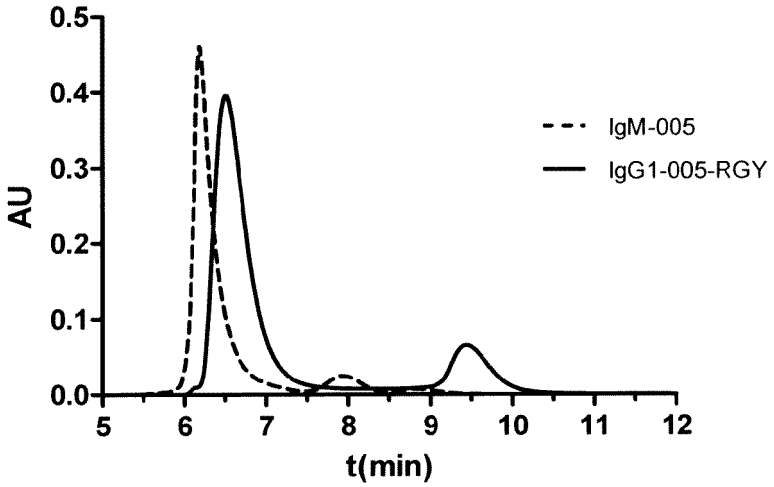
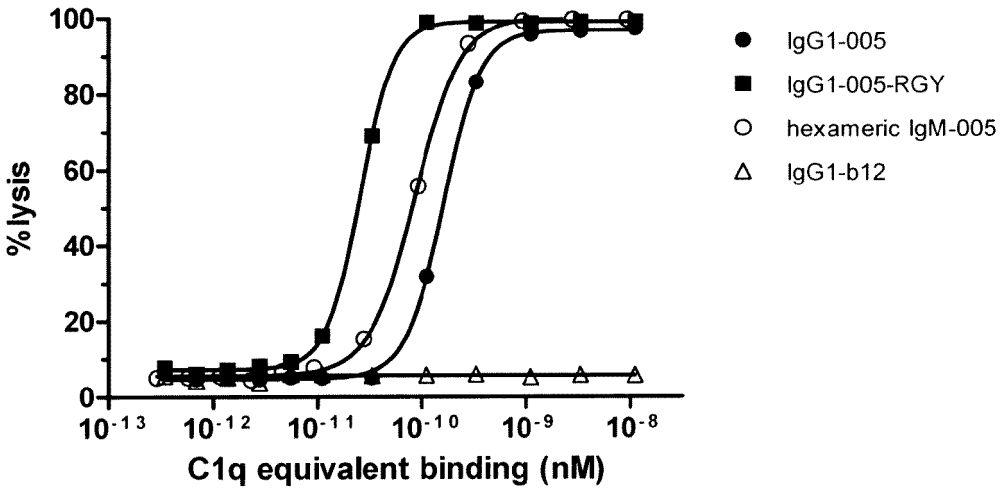


Figure 48

A


100
80
60
40
20
0
% lysis
10-13
10-12
10-11
10-10
10-9
10-8
C1q equivalent binding (nM)
IgG1-005
IgG1-005-RGY
hexameric IgM-005
IgG1-b12

B

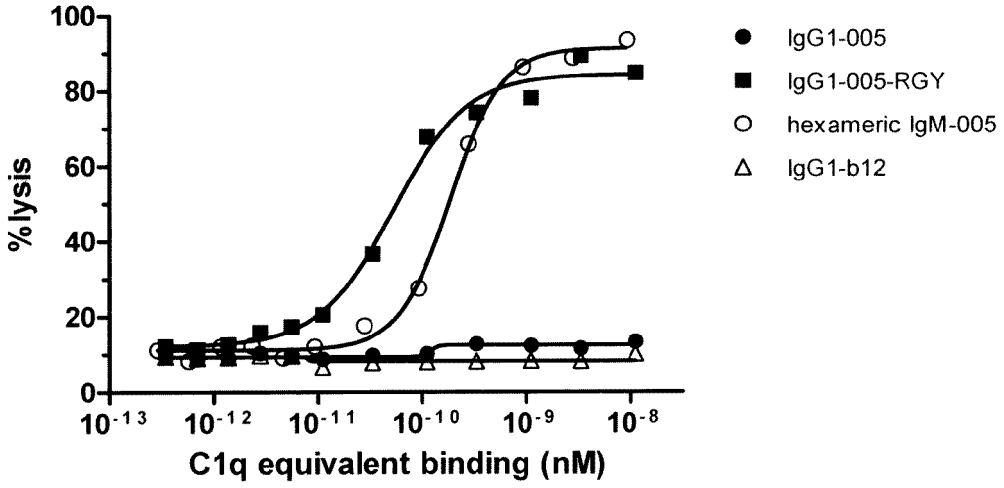
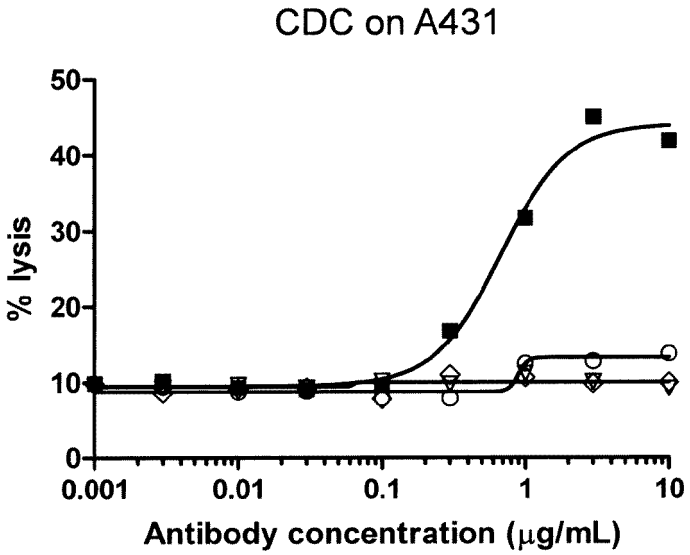

100
80
60
40
20
0
% lysis
10-13
10-12
10-11
10-10
10-9
10-8
C1q equivalent binding (nM)
IgG1-005
IgG1-005-RGY
hexameric IgM-005
IgG1-b12

Figure 49

A


CDC on A431
% lysis
50
40
30
20
10
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)

B

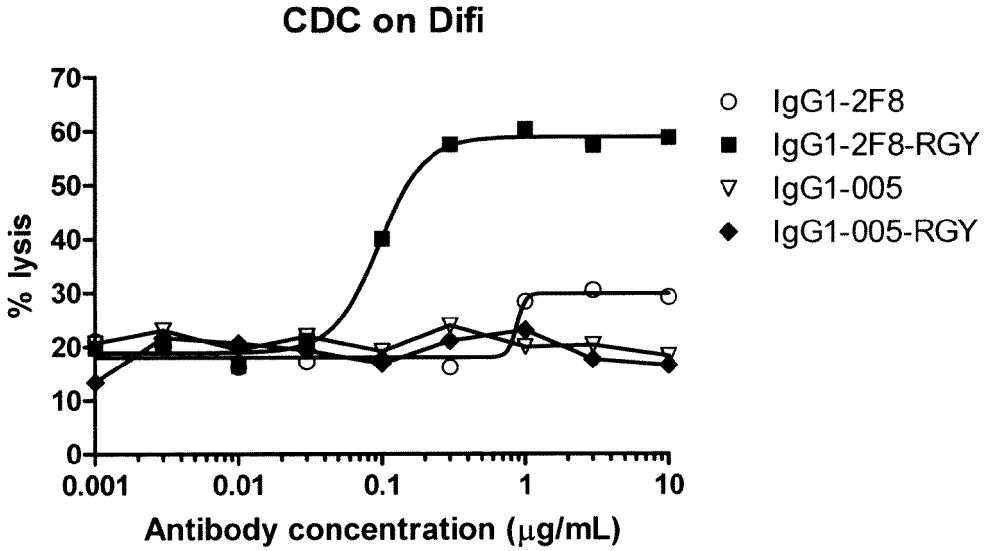

CDC on Difi
% lysis
70
60
50
40
30
20
10
0
0.001
0.01
0.1
1
10
Antibody concentration (µg/mL)
IgG1-2F8
IgG1-2F8-RGY
IgG1-005
IgG1-005-RGY

Figure 50

