FIGURE 1

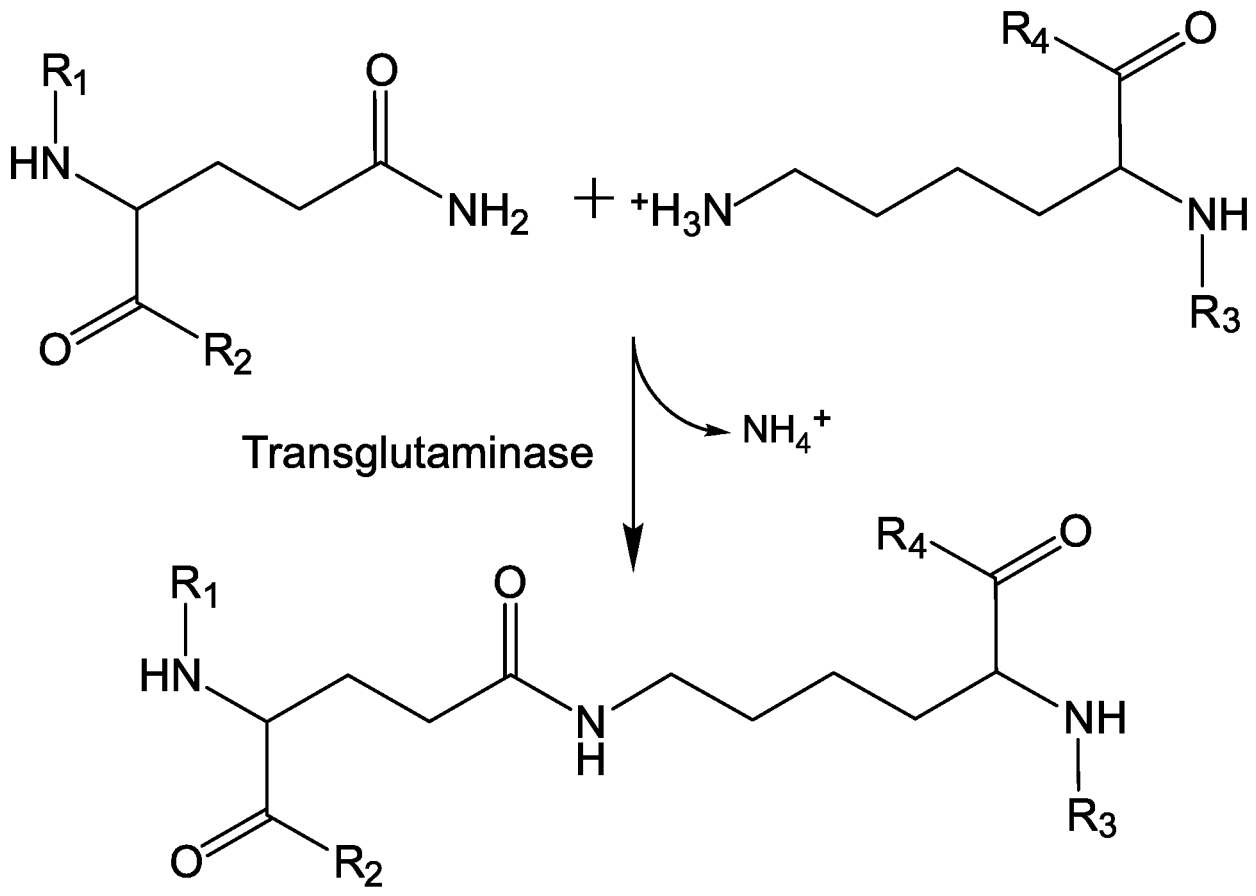
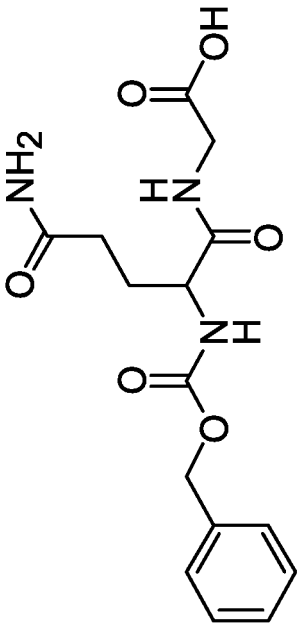

R1
HN
O
NH2
O
R2
+H3N
R4
O
NH
R3
Transglutaminase
NH4+
R1
HN
O
N
H
R4
O
NH
R3
O
R2

FIGURE 2

Z-Gln-Gly-OH



Z-Gln-Gly-CAD-Biotin

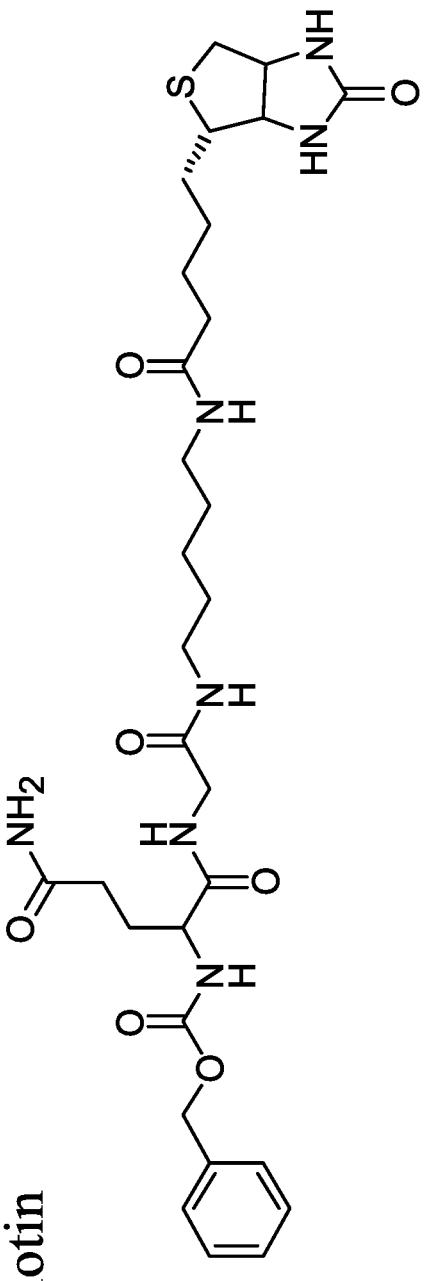
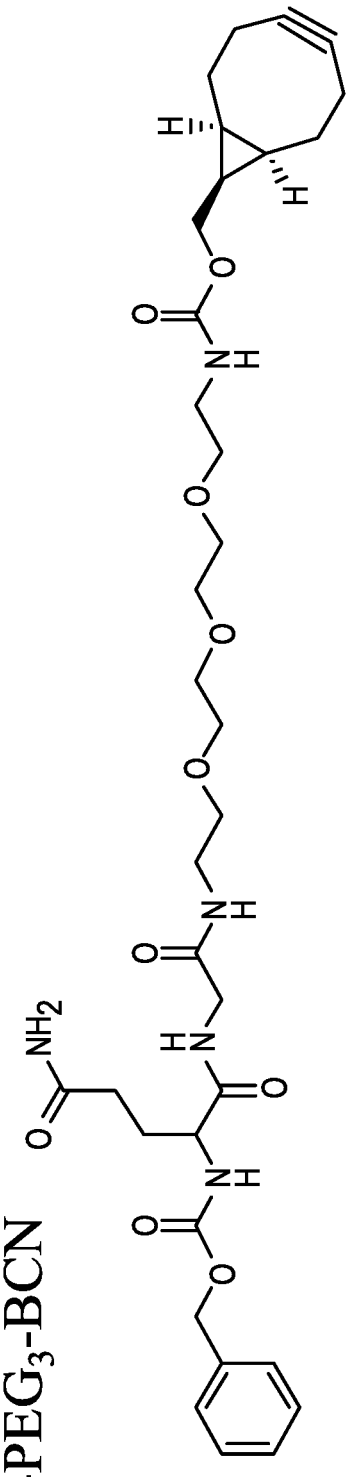
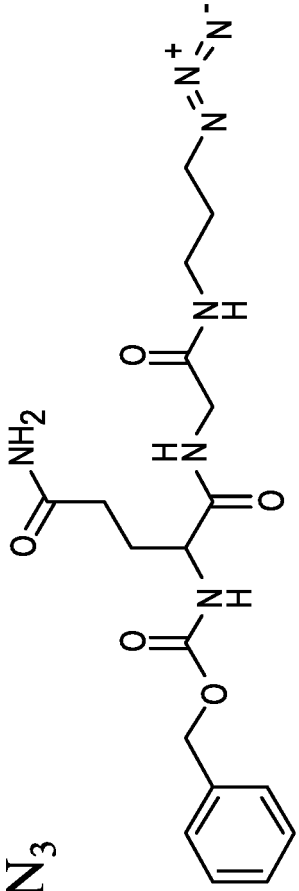


FIGURE 2 (cont.)

Z-Gln-Gly-PEG$_3$-BCN



Z-Gln-Gly-N$_3$



Z-Gln-Gly-PEG$_2$-Auristatin F

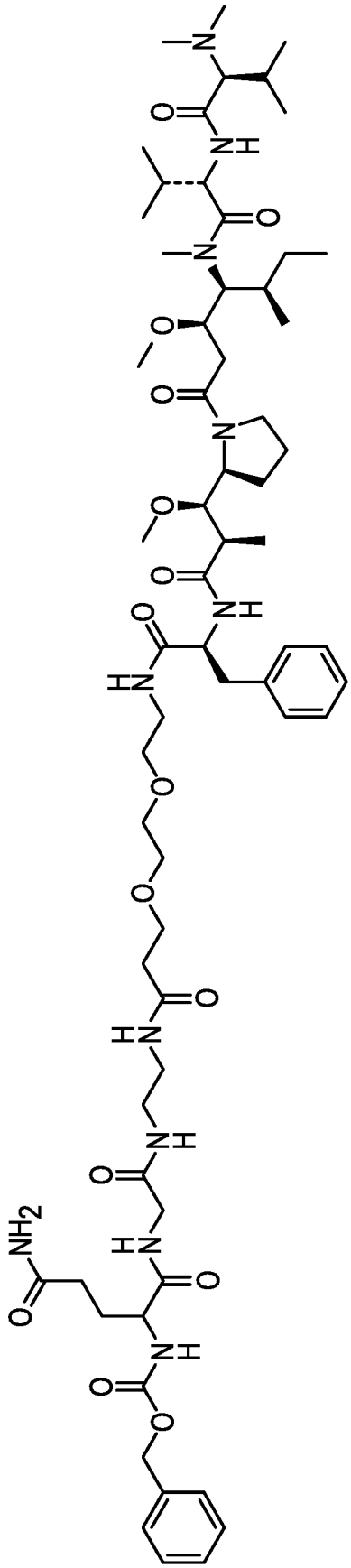


FIGURE 3

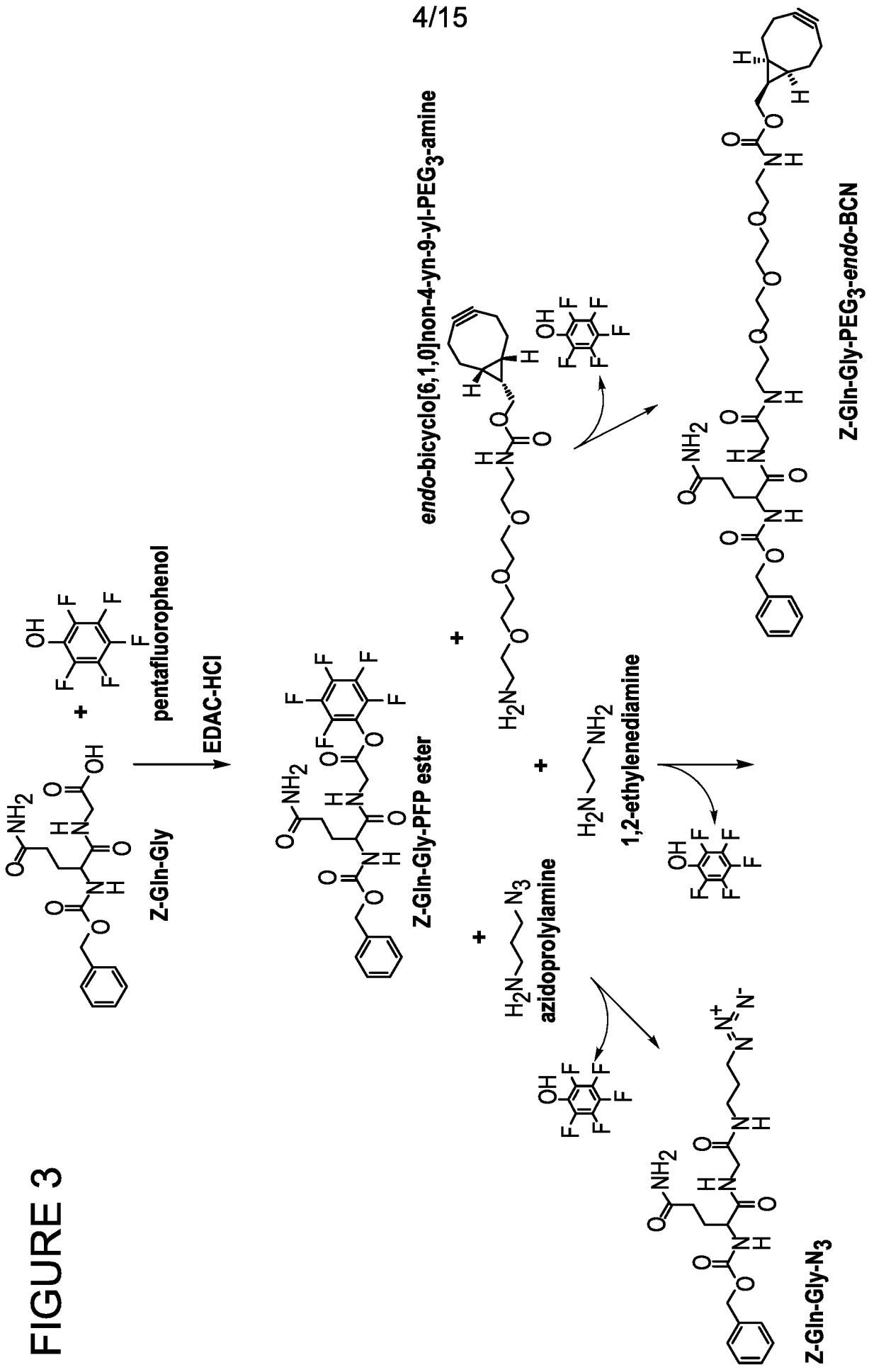

pentafluorophenol
EDAC-HCl
Z-Gln-Gly
Z-Gln-Gly-PFP ester
endo-bicyclo[6,1,0]non-4-yn-9-yl-PEG3-amine
azidoprolylamine
1,2-ethylenediamine
Z-Gln-Gly-PEG3-endo-BCN
Z-Gln-Gly-N3

FIGURE 3 (cont.)

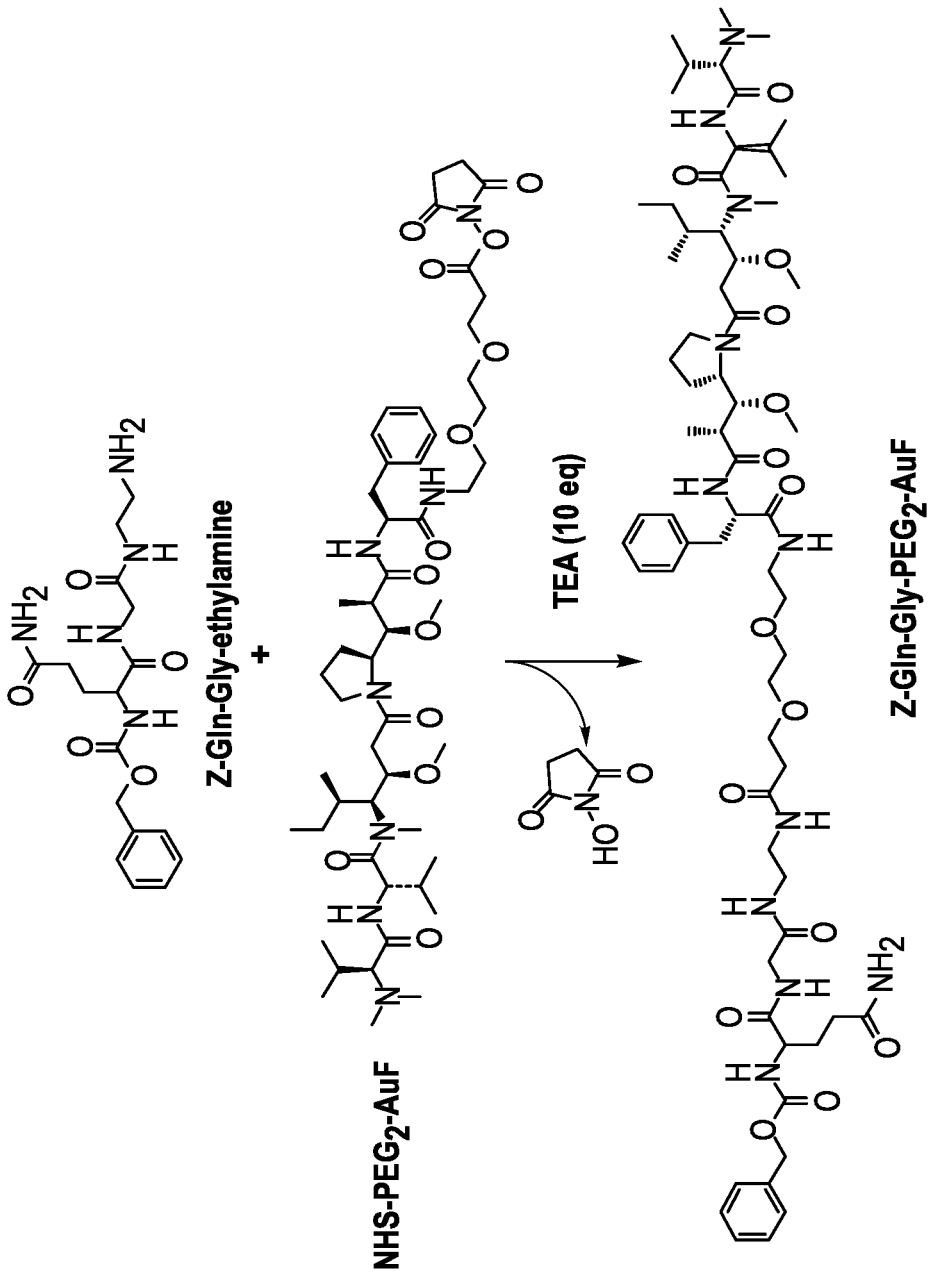


FIGURE 4A
Fab-kappa

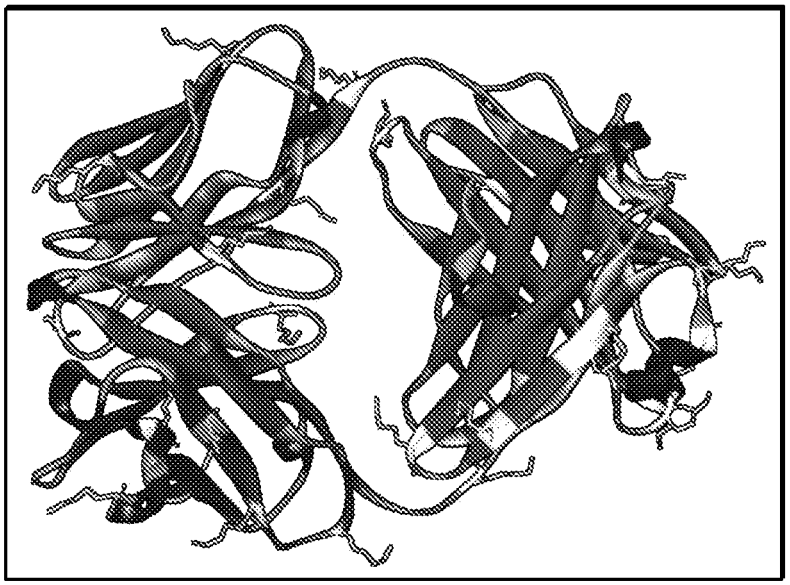


FIGURE 4B
Fab-lambda

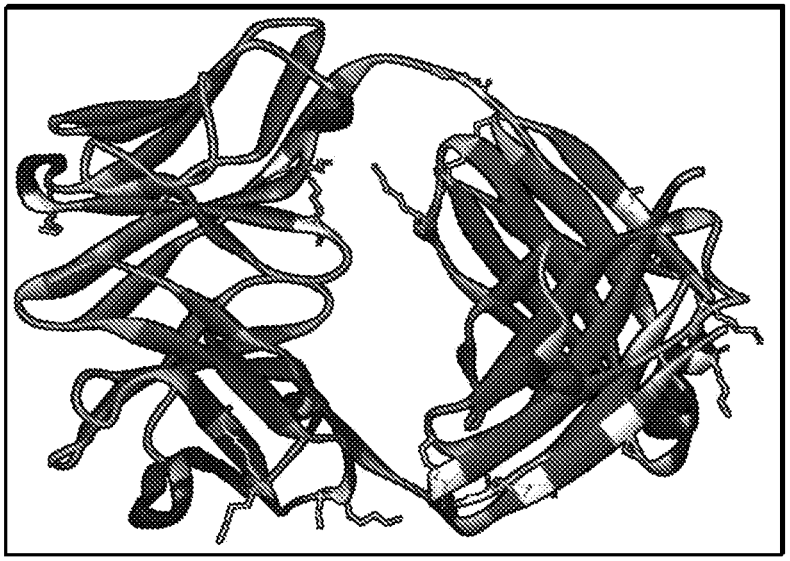


FIGURE 4C
Fc

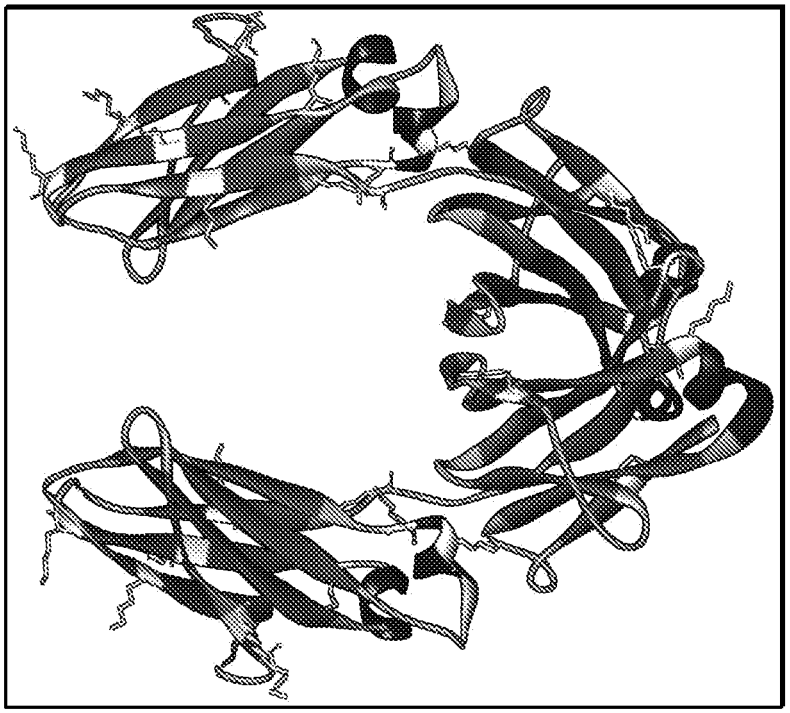


FIGURE 5

hu Cγ
118
ASTKGPSVFP LAPSSKSTSG GTAALGCLVK DYFPEPVTVS WNSGALTSGV HTFPAVLQSS GLYSLSSVVT VPSSSLGTQT YICNVNHKPS NTKVDKKVEP
218
KSCDKTHTCP PCPAPELLGG PSVFLFPPKP KDTLMISRTP EVTCVVVDVS HEDPEVKFNW YVDGVEVHNA KTKPREEQYN STYRVVSVLT VLHQDWLNGK
318
EYKCKVSNKA LPAPIEKTIS KAKGQPREPQ VYTLPPSRDE LTKNQVSLTC LVKGFYPSDI AVEWESNGQP ENNYKTTPPV LDSDGSFFLY SKLTVDKSRW
418 447
QQGNVFSCSV MHEALHNHYT QKSLSLSPGK

hu Cκ
108
RTVAAPSVFI FPPSDEQLKS GTASVVCLLN NFYPREAKVQ WKVDNALQSG NSQESVTEQD SKDSTYSLSS TLTLSKADYE KHKVYACEVT HQGLSSPVTK
208
SFNRGEC

hu Cλ
110
GQPKAAPSVT LFPPSSEELQ ANKATLVCLI SDFYPGAVTV AWKADSSPVK AGVETTTPSK QSNNKYAASS YLSLTPEQWK SHKSYSCQVT HEGSTVEKTV
210
APTECS

FIGURE 6A

Antibody 02

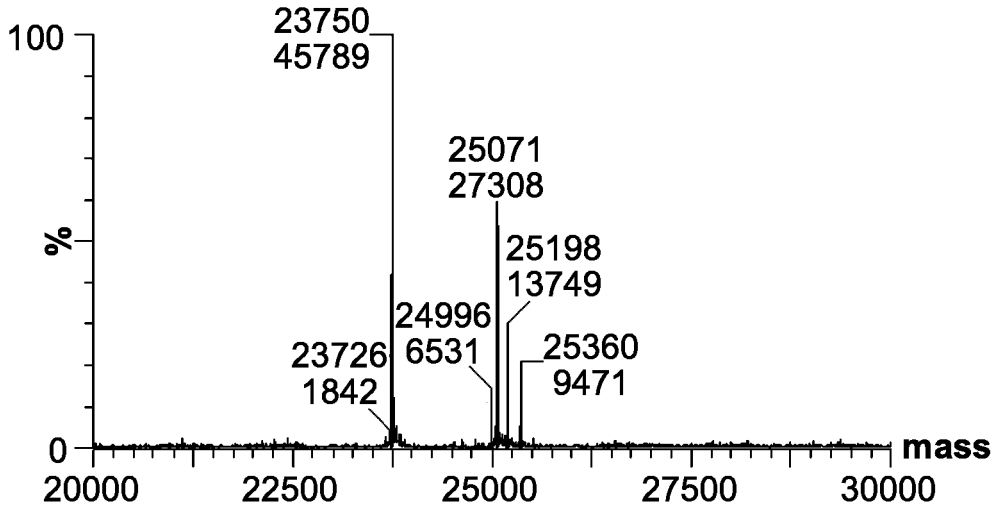


FIGURE 6B

Antibody 03

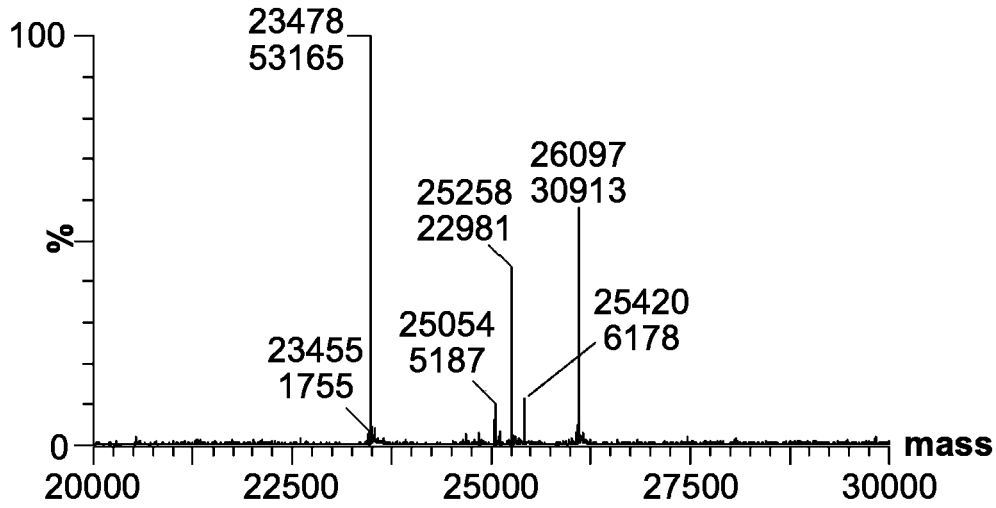


FIGURE 6C

Antibody 01

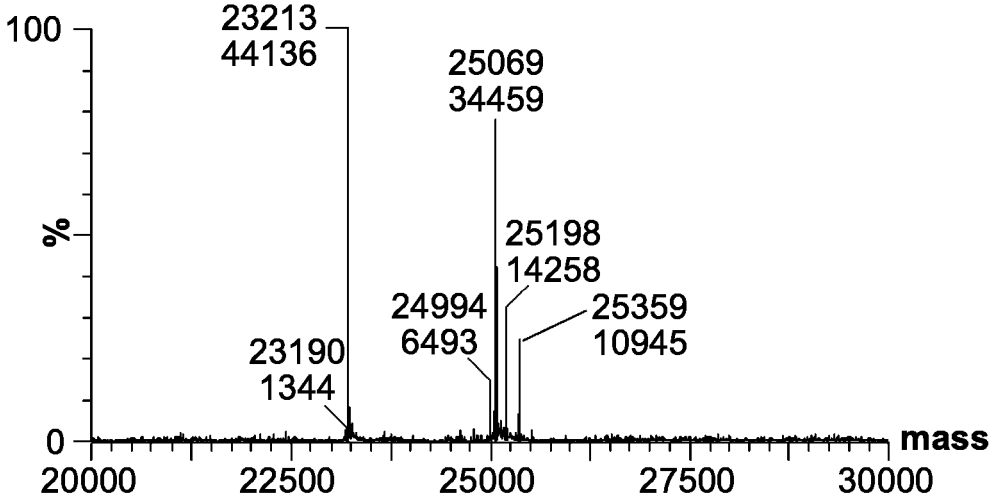


FIGURE 6D
Antibody 04

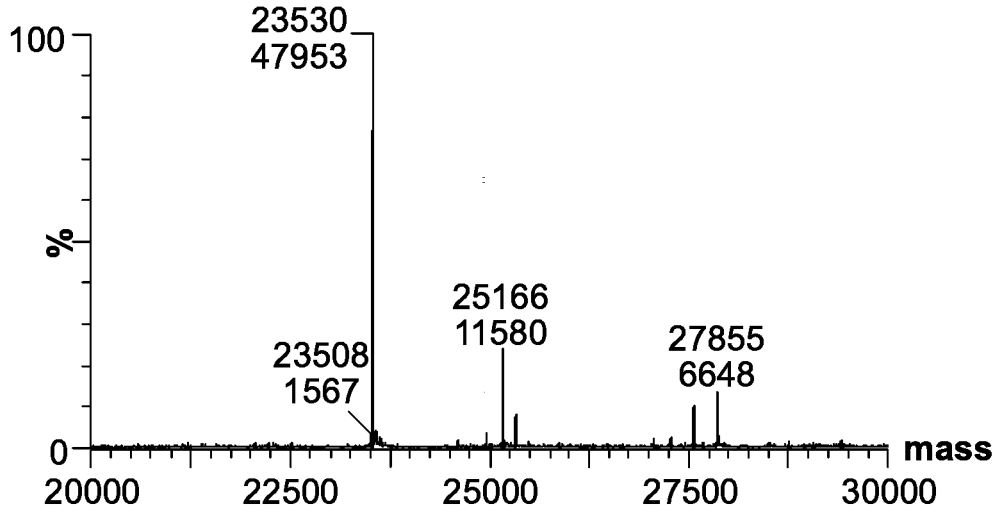


FIGURE 6E
Antibody 05

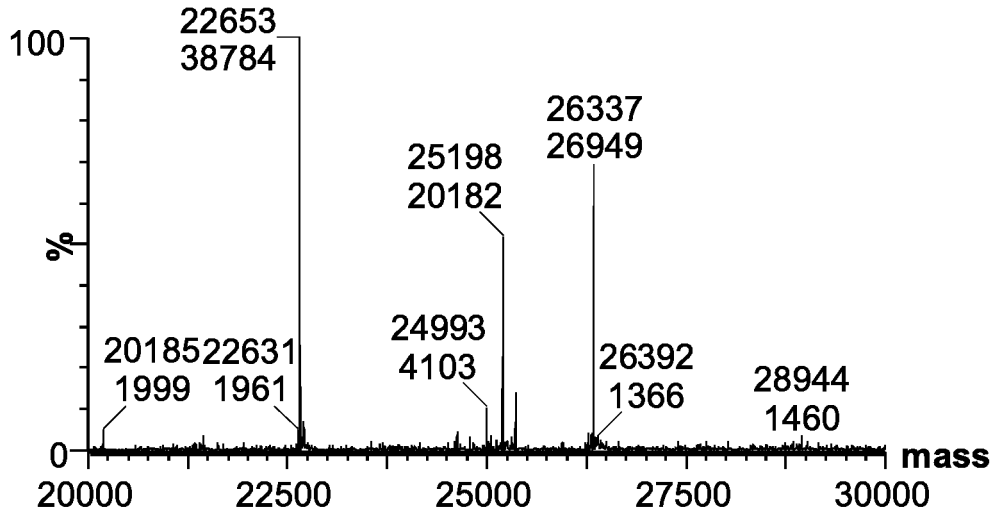
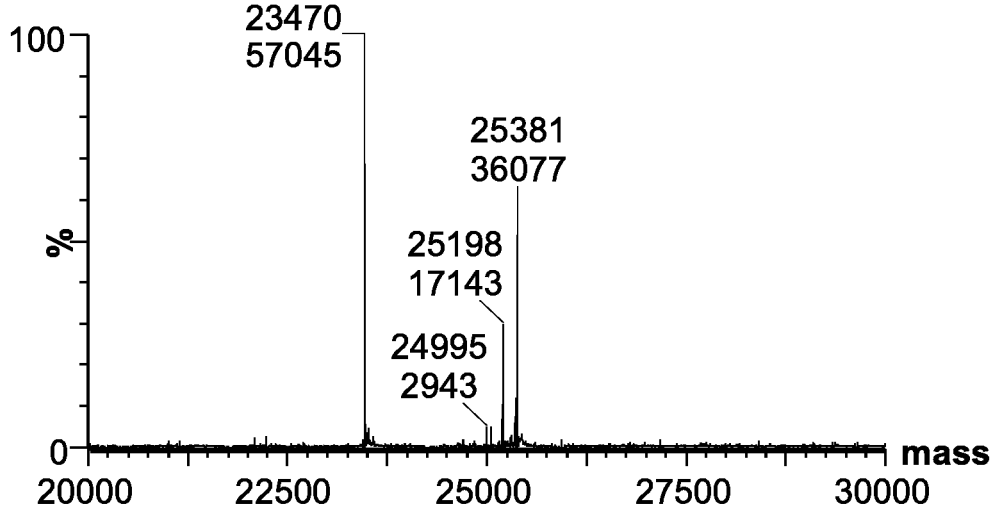


FIGURE 6F
Antibody 06



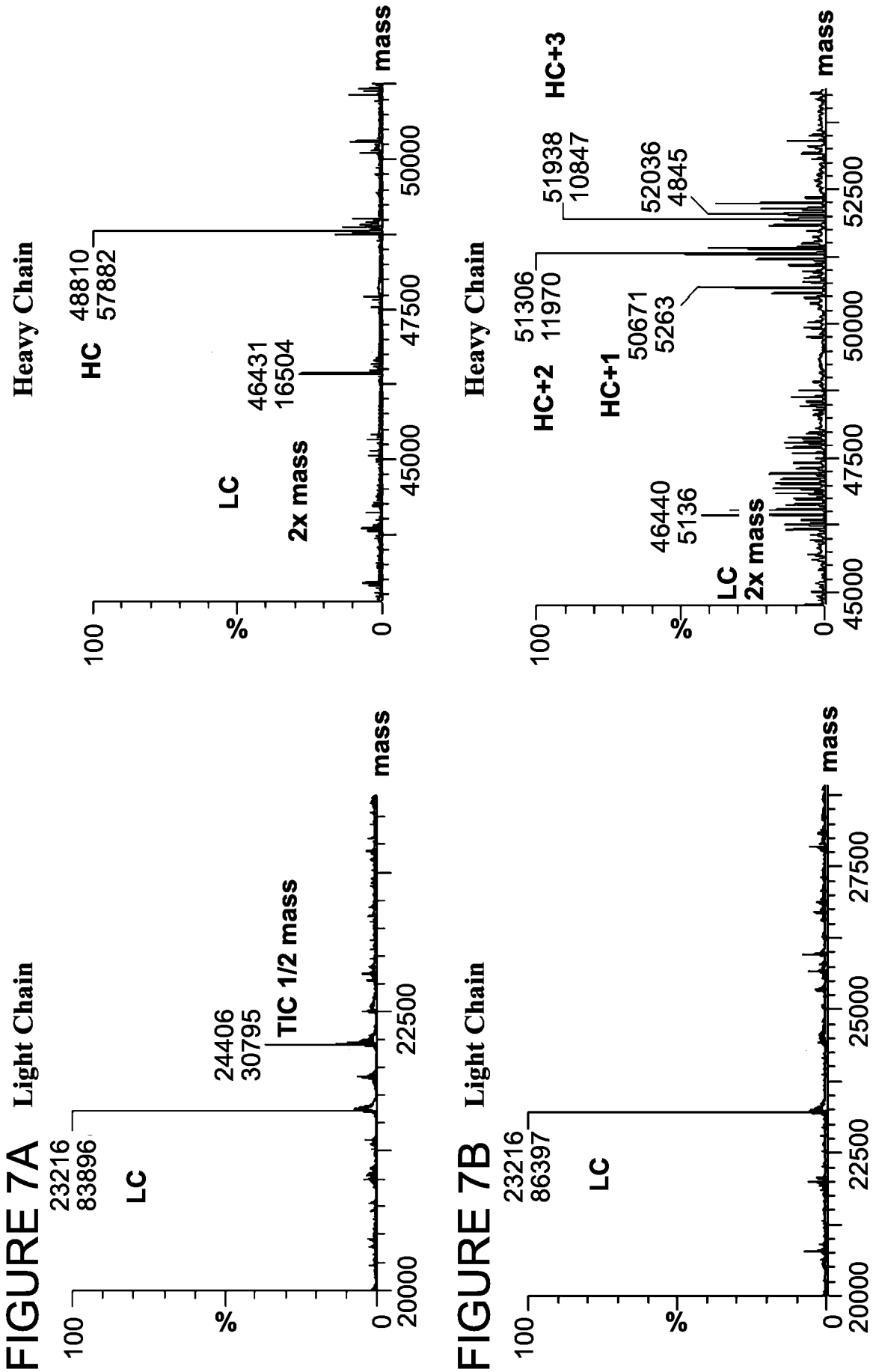
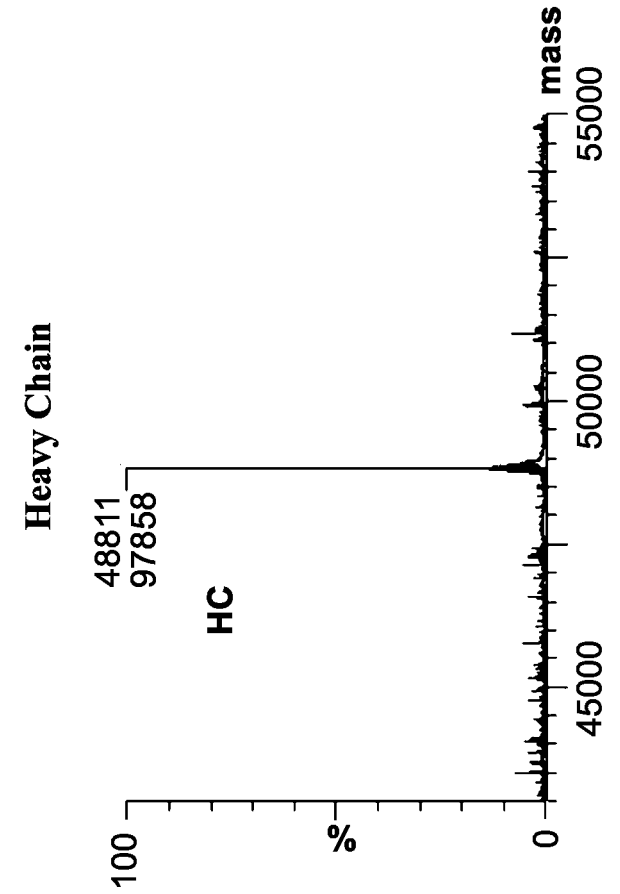


FIGURE 7A
Light Chain
23216
83896
LC
24406
30795
TIC 1/2 mass
100
%
0
20000
22500
mass
Heavy Chain
48810
57882
HC
46431
16504
LC
2x mass
45000
47500
50000
FIGURE 7B
Light Chain
23216
86397
LC
25000
27500
Heavy Chain
51306
11970
HC+2
50671
5263
HC+1
46440
5136
51938
10847
HC+3
52036
4845
52500


Heavy Chain
48811
97858
HC
100
%
0
45000
50000
55000
mass

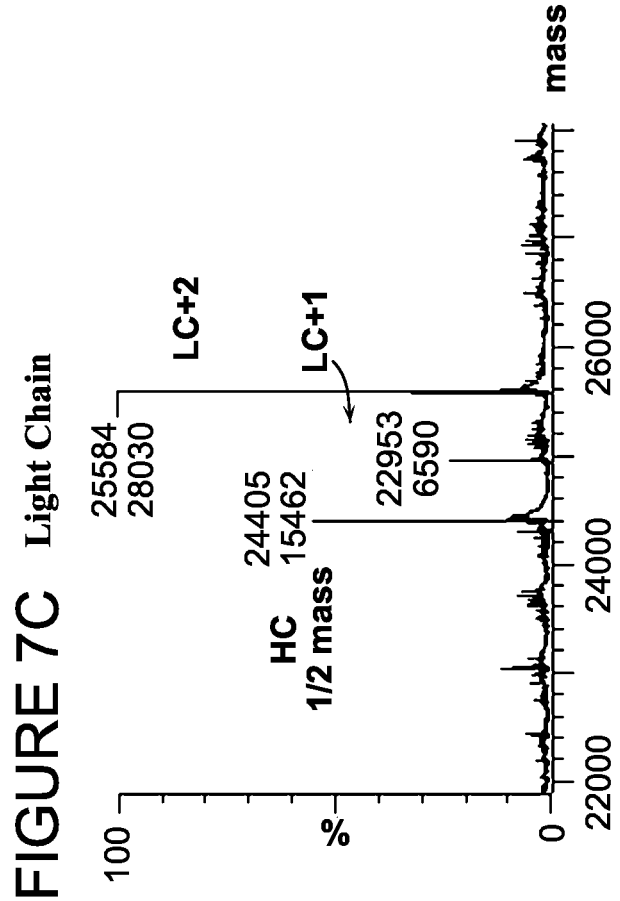

Light Chain
25584
28030
LC+2
LC+1
24405
15462
HC
1/2 mass
22953
6590
100
%
0
22000
24000
26000
mass

FIGURE 7C

FIGURE 8A

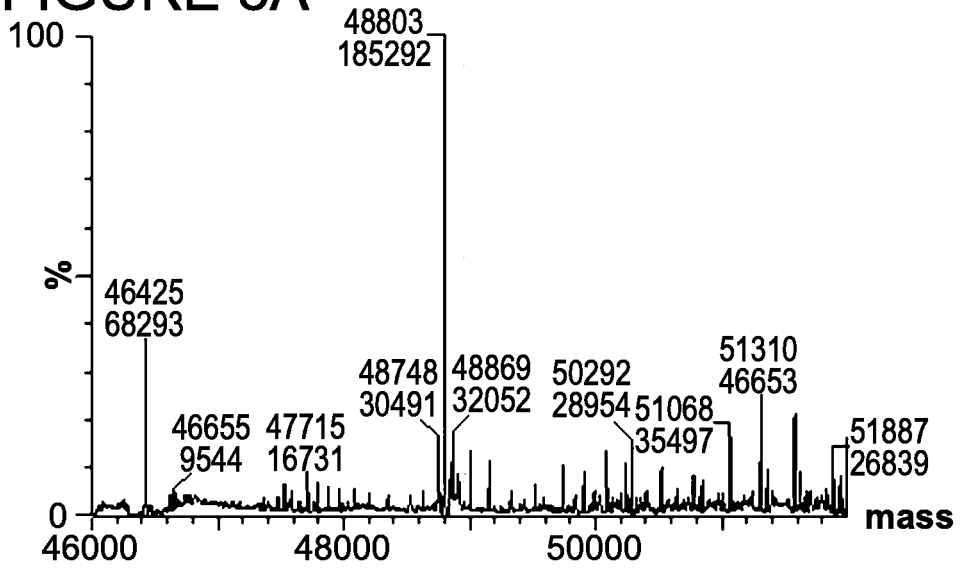


FIGURE 8B

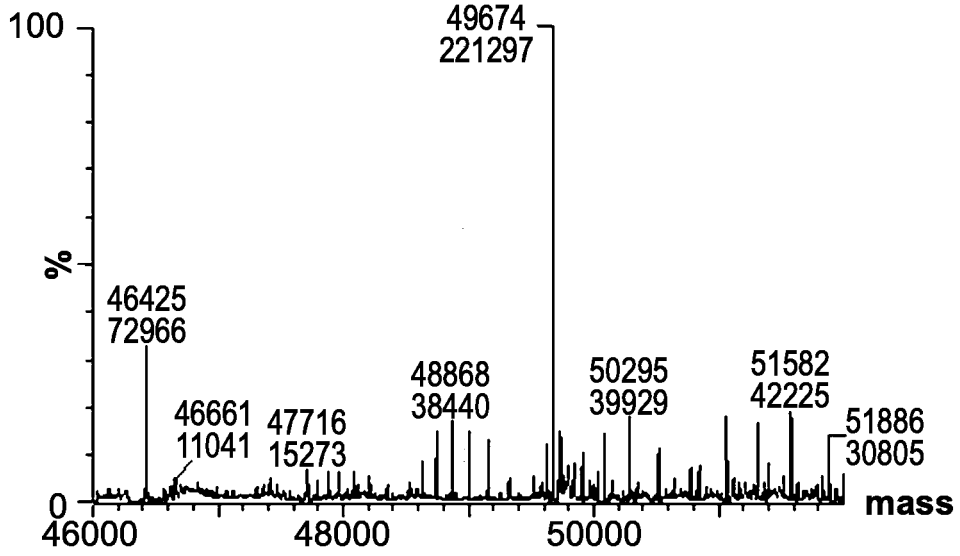


FIGURE 8C

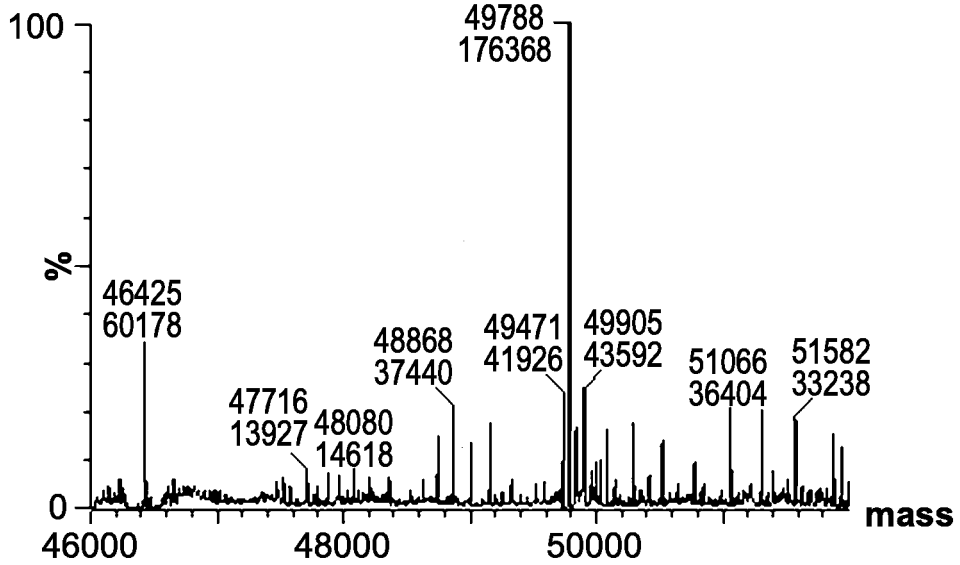


FIGURE 9A

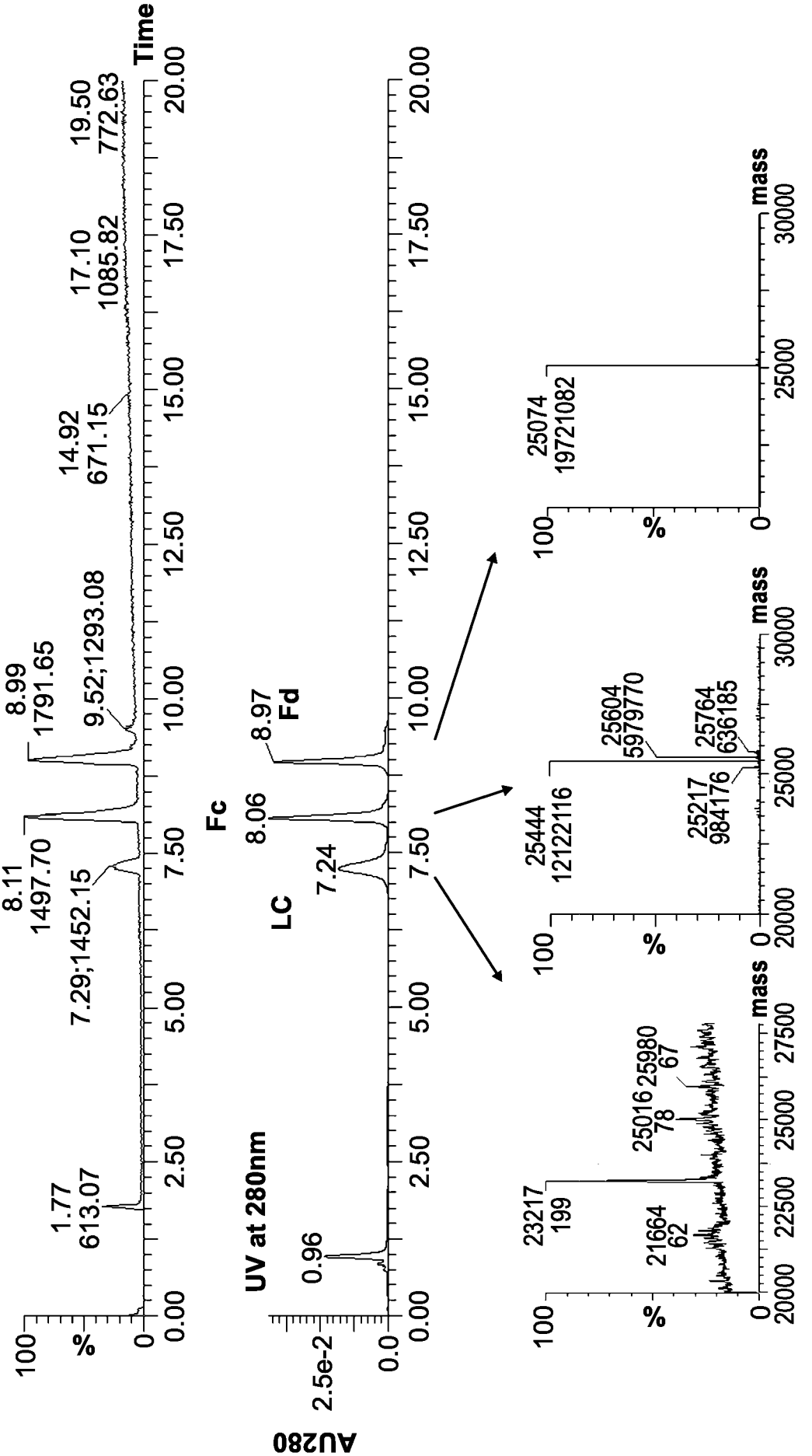
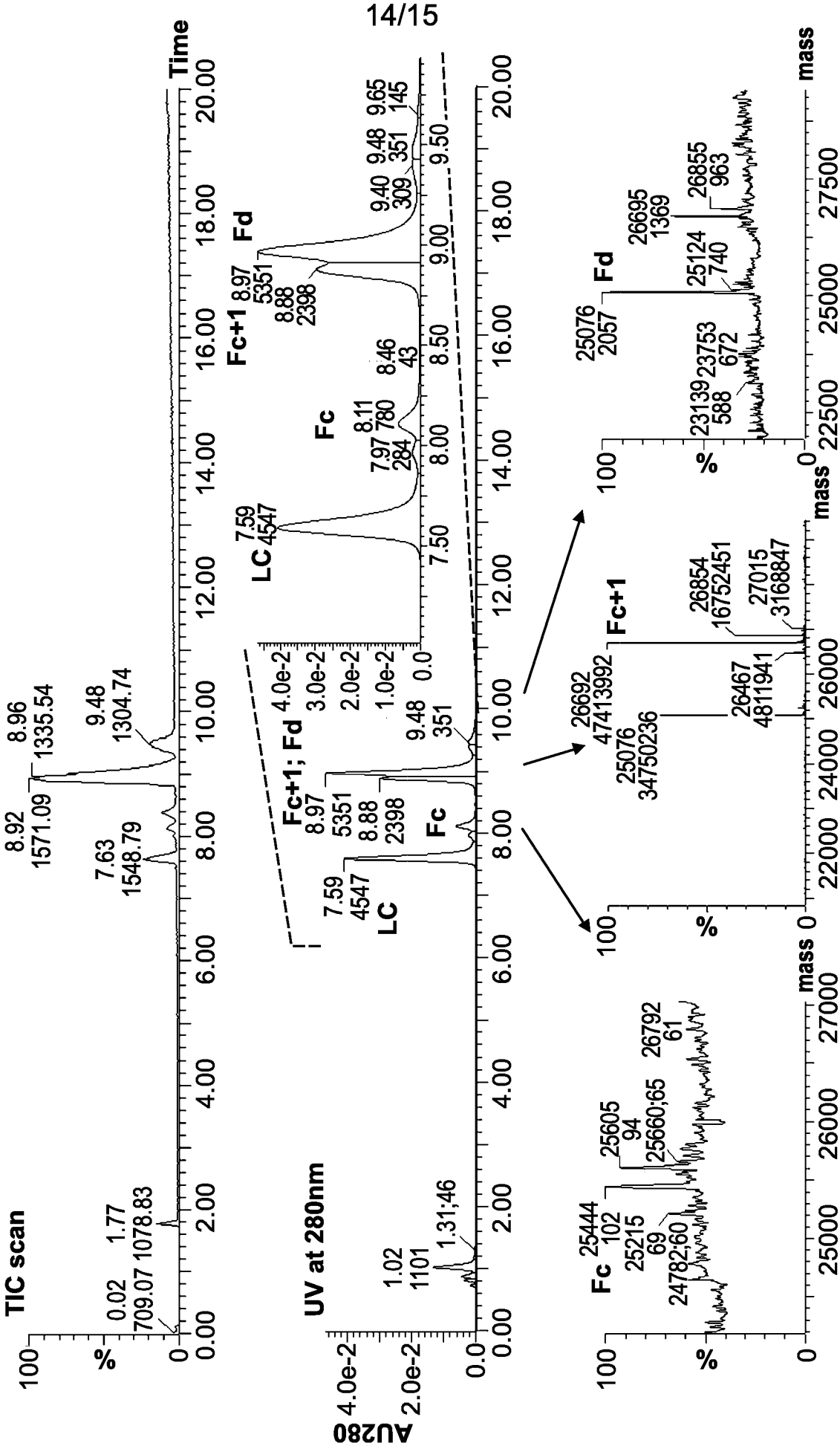

TIC scan
Time
1.77
613.07
8.11
1497.70
7.29;1452.15
8.99
1791.65
9.52;1293.08
14.92
671.15
17.10
1085.82
19.50
772.63
Fc
LC
UV at 280nm
AU280
0.96
7.24
8.06
8.97
Fd
25074
19721082
25604
5979770
25764
636185
25444
12122116
25217
984176
23217
199
21664
62
25016
78
25980
67
mass
%

FIGURE 9B


TIC scan
UV at 280nm
AU280
Time
mass
Fc
Fc+1; Fd
Fc+1
Fd
LC
8.92
1571.09
8.96
1335.54
9.48
1304.74
7.63
1548.79
1.77
1078.83
0.02
709.07
1.02
1101
1.31;46
7.59
4547
8.97
5351
8.88
2398
9.48
351
7.97
284
8.11
780
8.46
43
9.40
309
9.48
351
9.65
145
25444
102
25215
69
24782;60
25605
94
25660;65
26792
61
26692
47413992
25076
34750236
26854
16752451
27015
3168847
26467
4811941
25076
2057
26695
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23139
588
23753
672
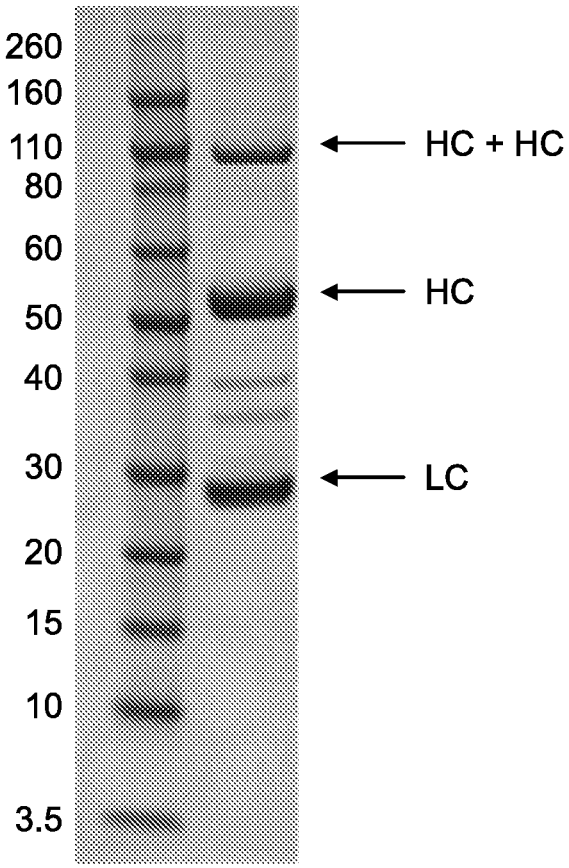
FIGURE 10