FIG. 1

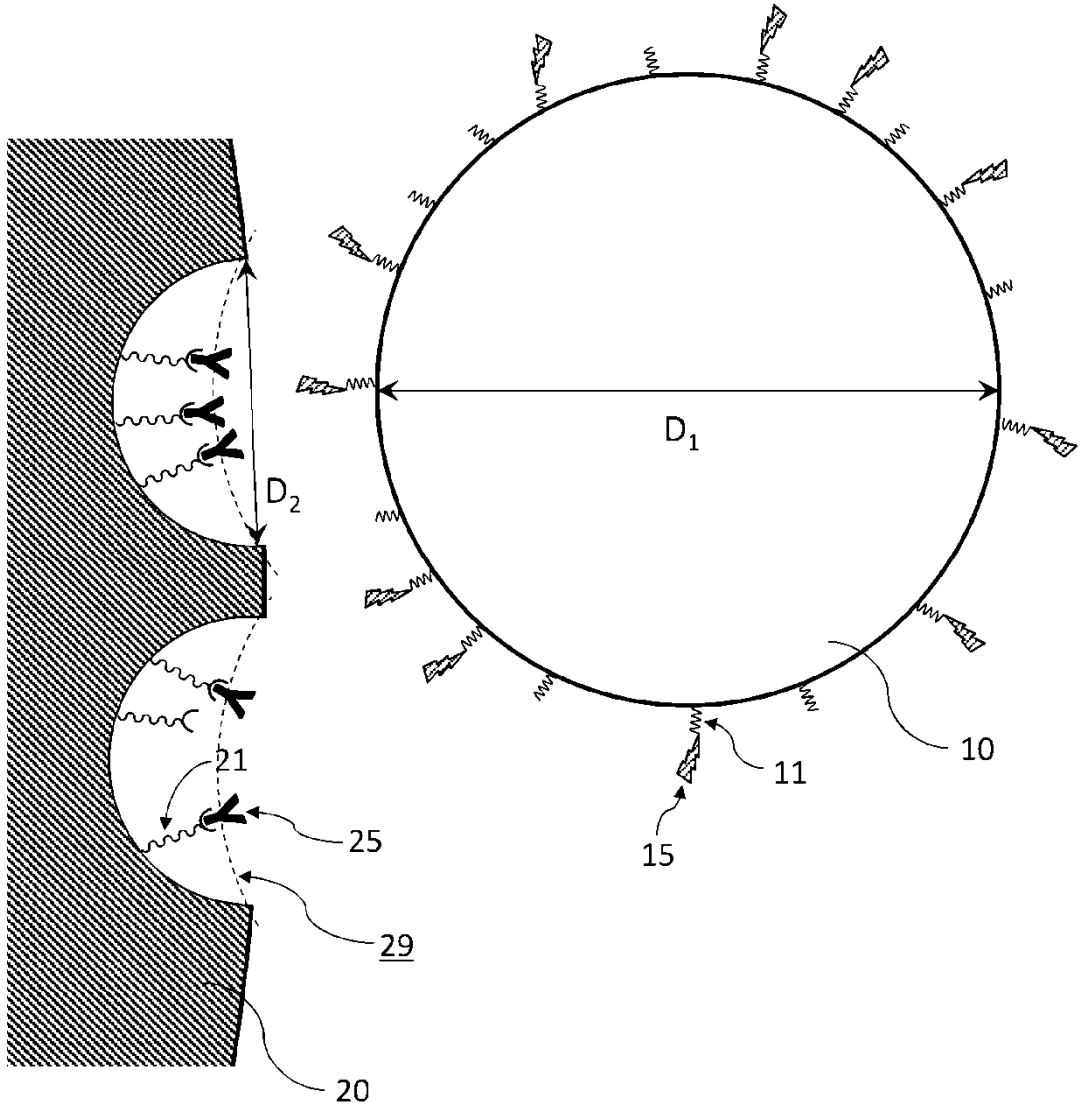


FIG. 2

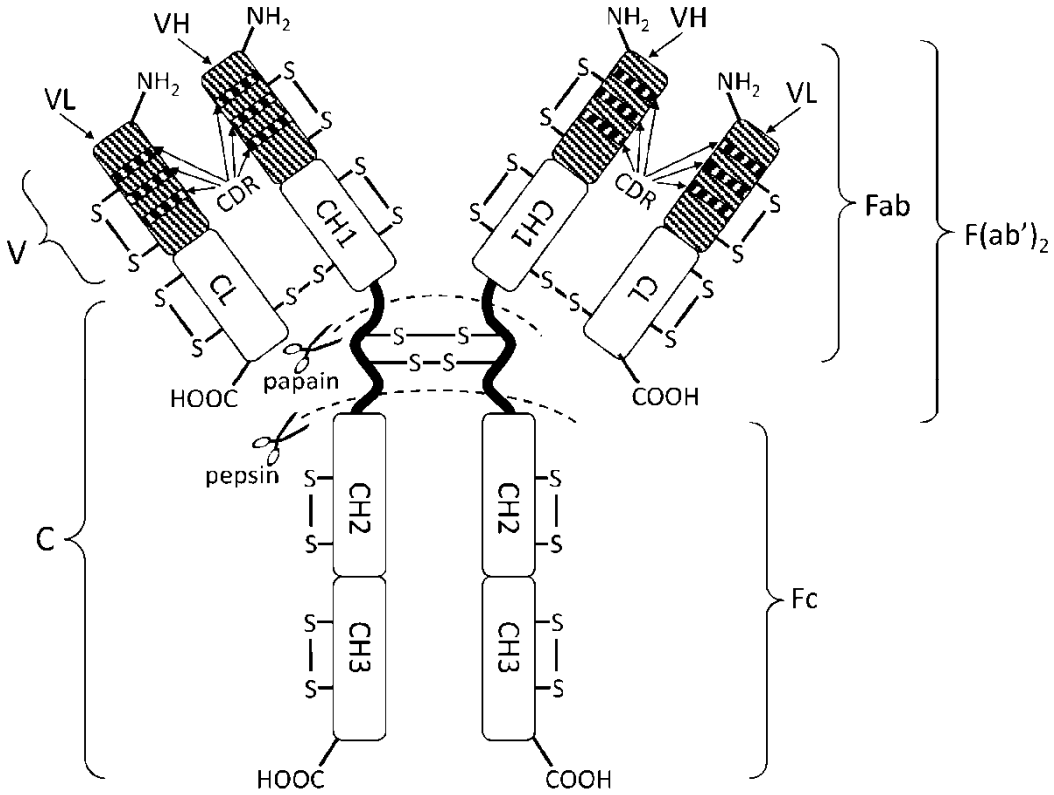

VH
NH2
VL
NH2
CDR
CH1
CL
V
C
papain
pepsin
HOOC
CH2
CH3
Fab
F(ab')2
Fc
COOH

FIG. 3

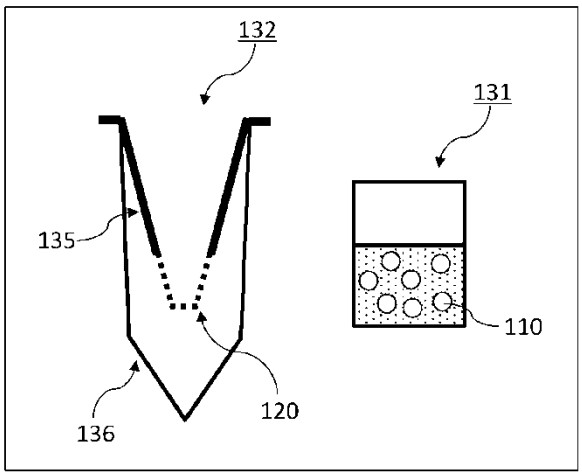
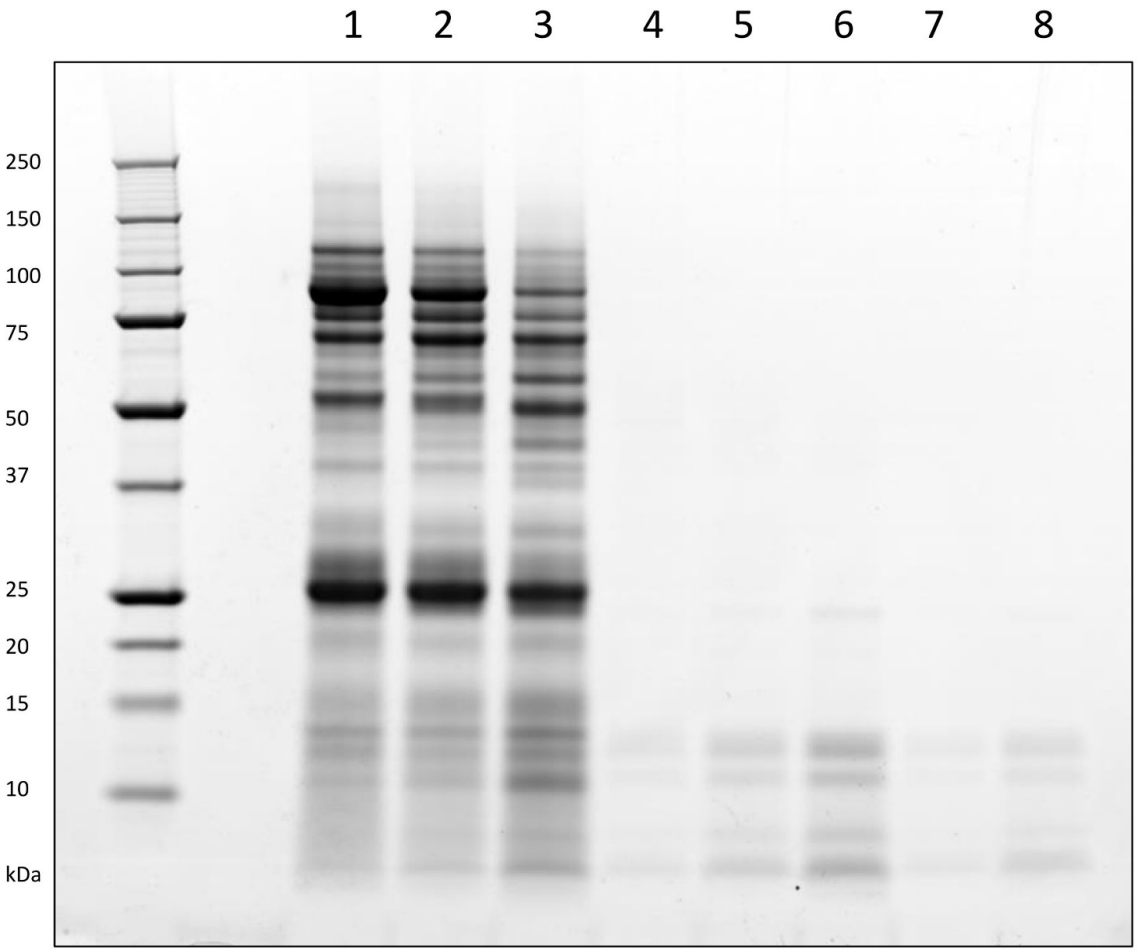

132
131
135
110
120
136

FIG. 4



1. ProteinG-IgG / FG beads-Trypsin 5μg
2. ProteinG-IgG / FG beads-Trypsin 10μg
3. ProteinG-IgG / FG beads-Trypsin 25μg
4. ProteinG / FG beads-Trypsin 5μg
5. ProteinG / FG beads-Trypsin 10μg
6. ProteinG / FG beads-Trypsin 25μg
7. FG beads-Trypsin 5ug
8. FG beads-Trypsin 10ug

FIG. 5

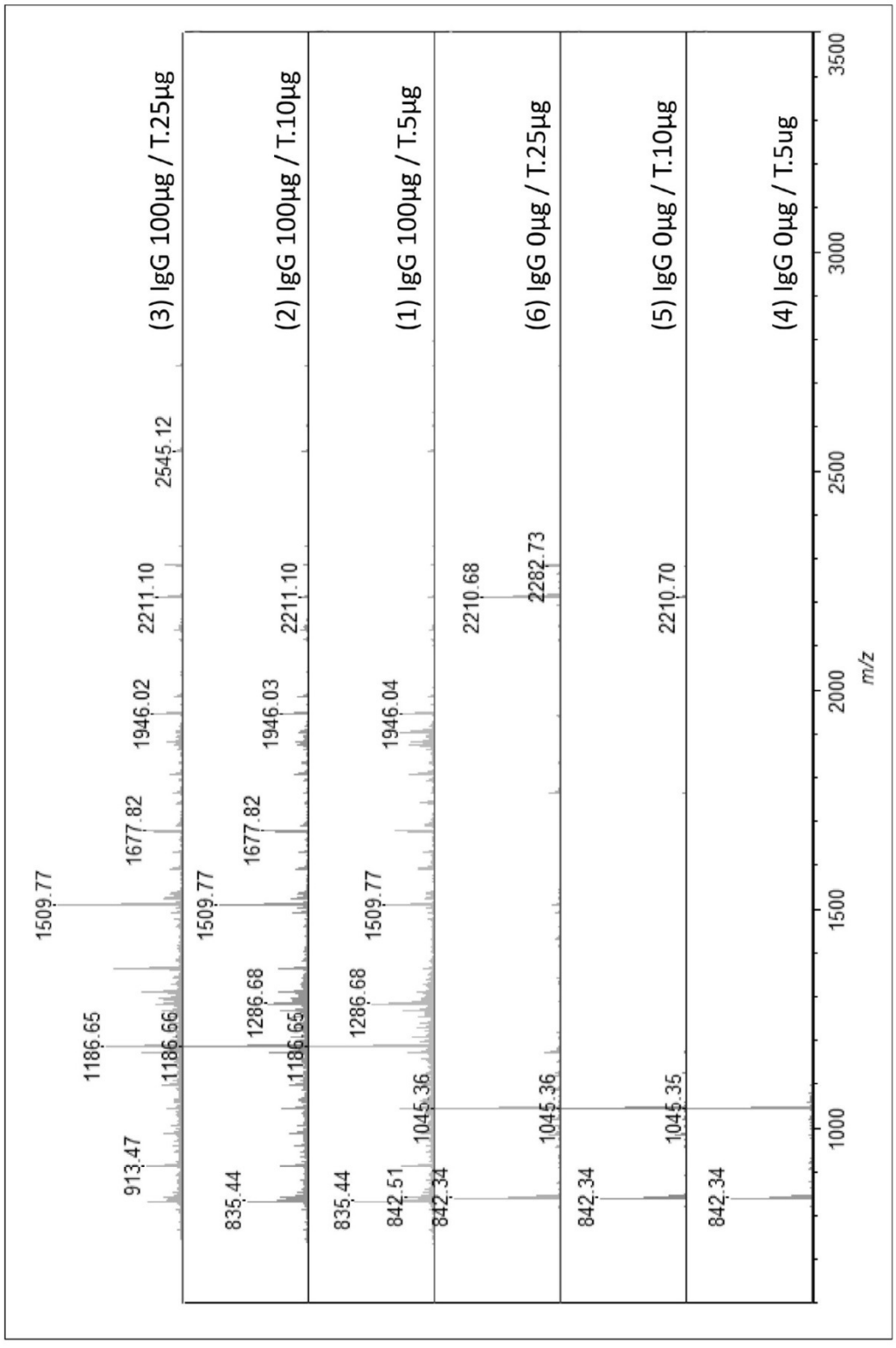

(3) IgG 100μg / T.25μg
(2) IgG 100μg / T.10μg
(1) IgG 100μg / T.5μg
(6) IgG 0μg / T.25μg
(5) IgG 0μg / T.10μg
(4) IgG 0μg / T.5ug
1509.77
1677.82
1946.02
2211.10
2545.12
1186.65
1286.68
913.47
835.44
842.51
1045.36
842.34
2210.68
2282.73
2210.70
1045.35
1000
1500
2000
2500
3000
3500
m/z

FIG. 6

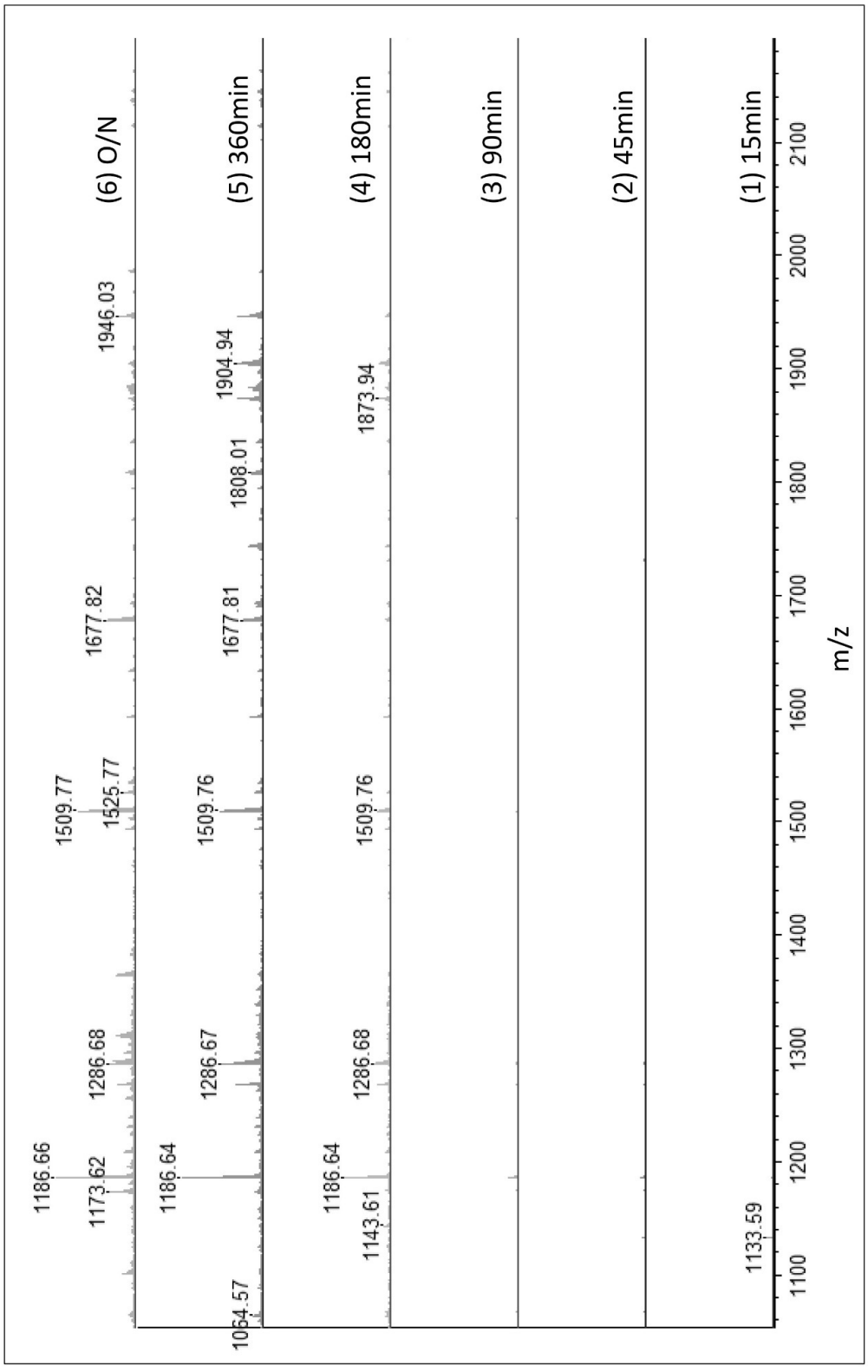
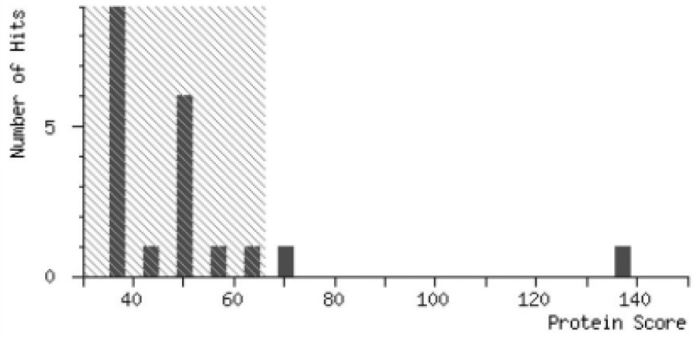

(6) O/N
(5) 360min
(4) 180min
(3) 90min
(2) 45min
(1) 15min
1186.66
1173.62
1286.68
1509.77
1525.77
1677.82
1946.03
1186.64
1064.57
1286.67
1509.76
1677.81
1808.01
1904.94
1186.64
1143.61
1286.68
1509.76
1873.94
1133.59
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
2100
m/z

FIG. 7



Concise Protein Summary Report

Format As | Concise Protein Summary | Help

Significance threshold p< 0.05 | Max. number of hits AUTO

Preferred taxonomy All entries

Re-Search All | Search Unmatched

1. gi|442924 **Mass:** 23708 **Score:** 137 **Expect:** 4.9e-009 **Matches:** 13
Chain B, X-Ray Structures Of The Antigen-Binding Domains From Three Varian
gi|442916 **Mass:** 13156 **Score:** 118 **Expect:** 3.9e-007 **Matches:** 11
Chain B, X-Ray Structures Of The Antigen-Binding Domains From Three Varian
gi|213424086 **Mass:** 24518 **Score:** 116 **Expect:** 6.2e-007 **Matches:** 12
Chain H, Dual Specific Bh1 Fab In Complex With Vegf
gi|442920 **Mass:** 23686 **Score:** 98 **Expect:** 4e-005 **Matches:** 10
Chain B, X-Ray Structures Of The Antigen-Binding Domains From Three Varian

FIG. 8

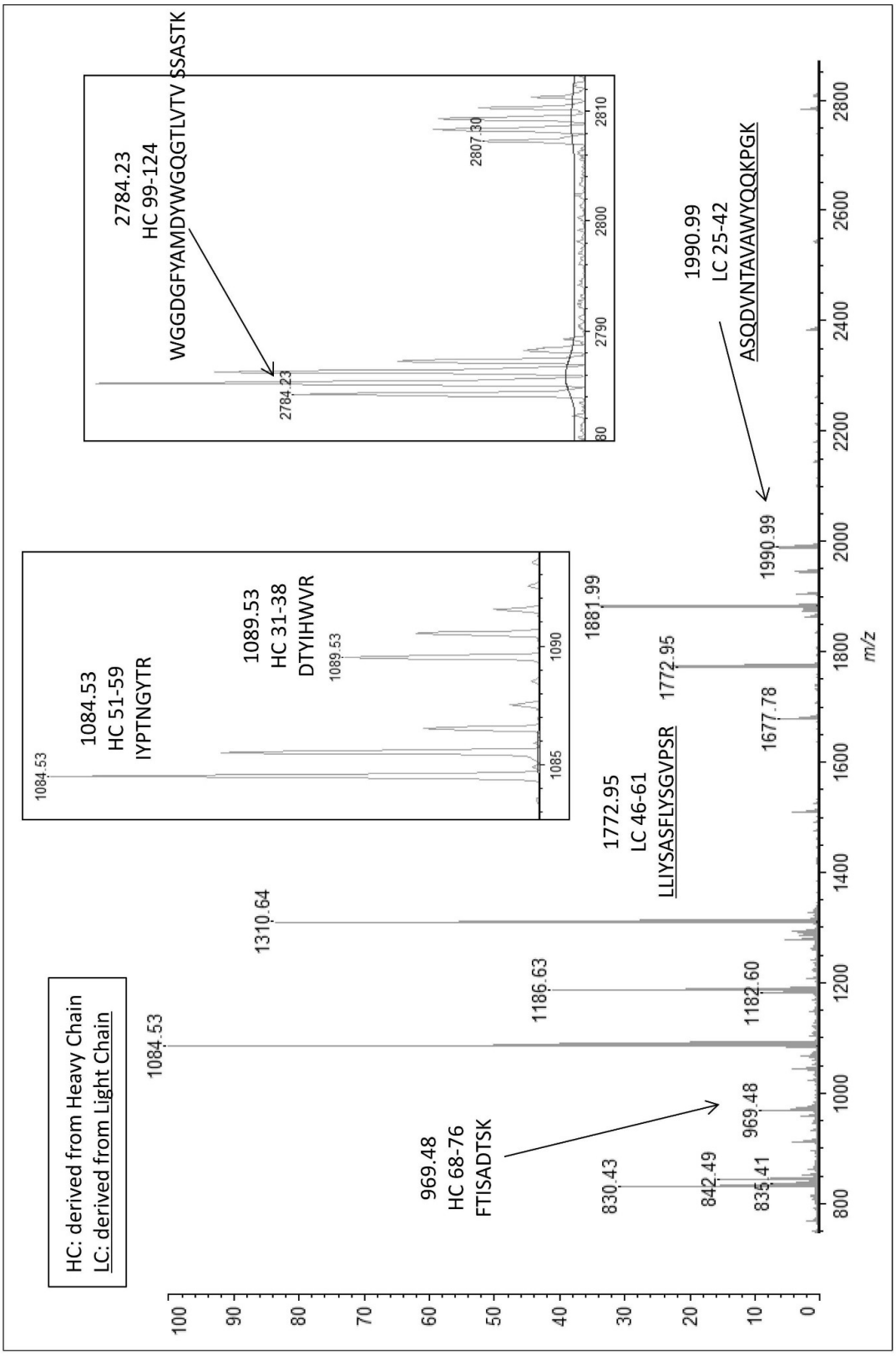

HC: derived from Heavy Chain
LC: derived from Light Chain
1084.53
HC 51-59
IYPTNGYTR
1089.53
HC 31-38
DTYIHWVR
2784.23
HC 99-124
WGGDGFYAMDYWGQGTLVTV SSASTK
969.48
HC 68-76
FTISADTSK
1772.95
LC 46-61
LLIYSASFLYSGVPSR
1990.99
LC 25-42
ASQDVNTAVAWYQQKPGK
m/z

FIG. 9

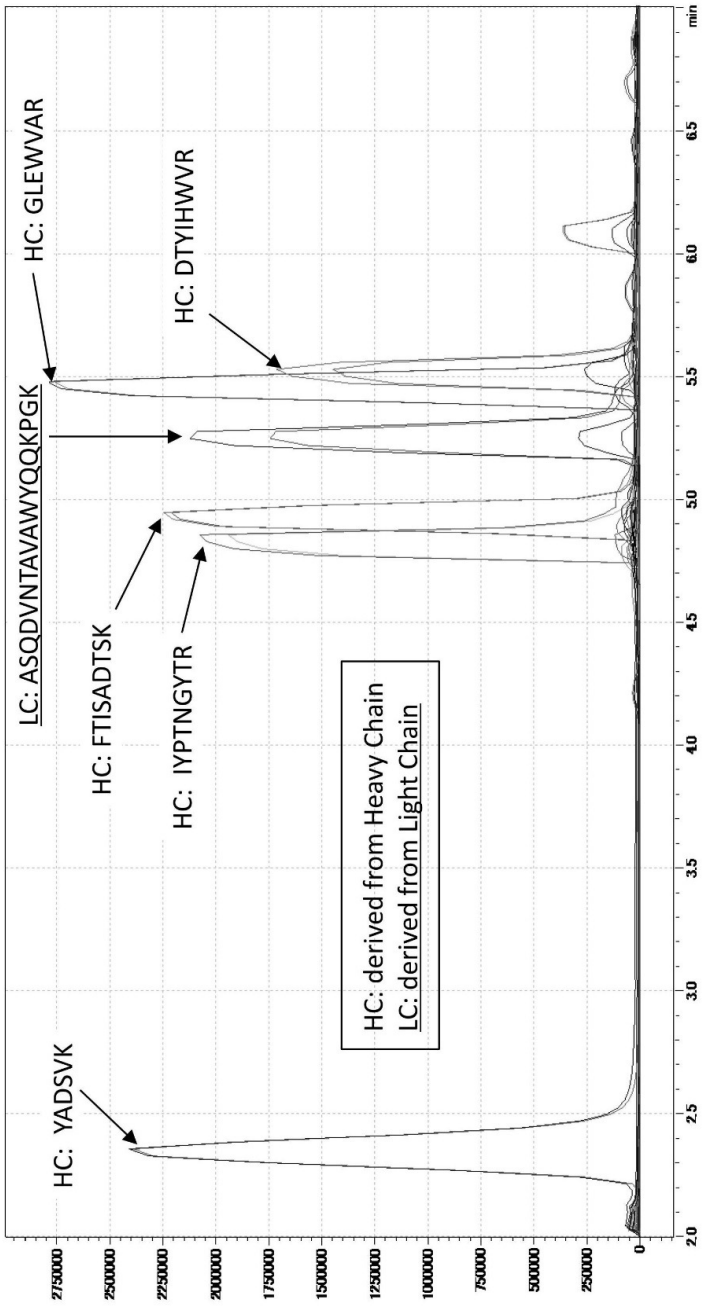

HC: YADSVK
HC: FTISADTSK
HC: IYPTNGYTR
LC: ASQDVNTAVAWYQQKPGK
HC: GLEWVAR
HC: DTYIHWVR
HC: derived from Heavy Chain
LC: derived from Light Chain
min

FIG. 10

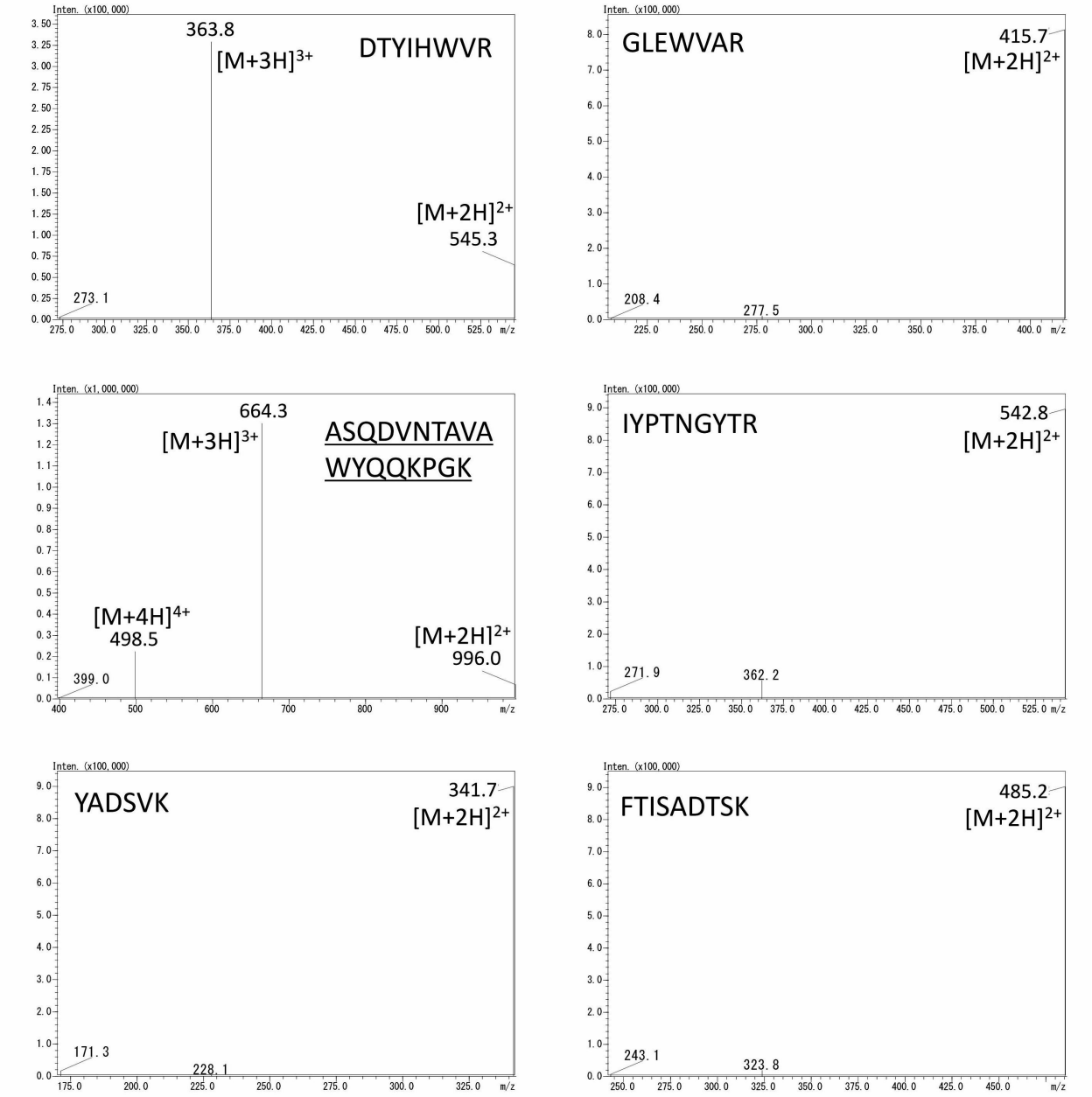
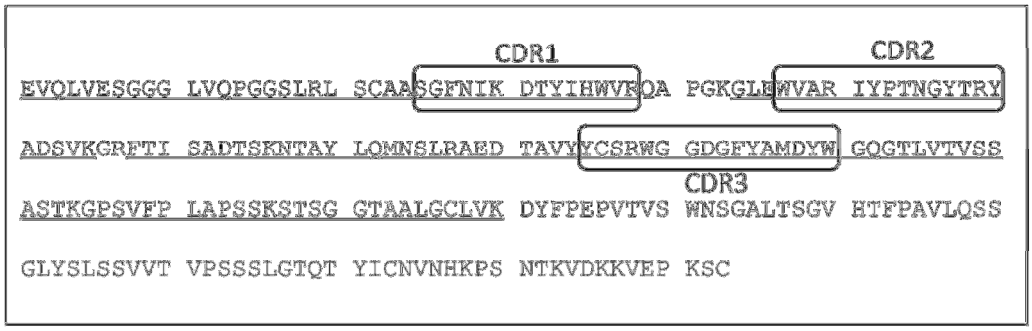

Inten. (x100,000)
363.8
[M+3H]3+
DTYIHWVR
[M+2H]2+
545.3
273.1
m/z
Inten. (x100,000)
GLEWVAR
415.7
[M+2H]2+
208.4
277.5
m/z
Inten. (x1,000,000)
664.3
[M+3H]3+
ASQDVNTAVA
WYQQKPGK
[M+4H]4+
498.5
[M+2H]2+
996.0
399.0
m/z
Inten. (x100,000)
IYPTNGYTR
542.8
[M+2H]2+
271.9
362.2
m/z
Inten. (x100,000)
YADSVK
341.7
[M+2H]2+
171.3
228.1
m/z
Inten. (x100,000)
FTISADTSK
485.2
[M+2H]2+
243.1
323.8
m/z

FIG. 11

(A) Herceptin H-Chain



(B) Herceptin H-Chain

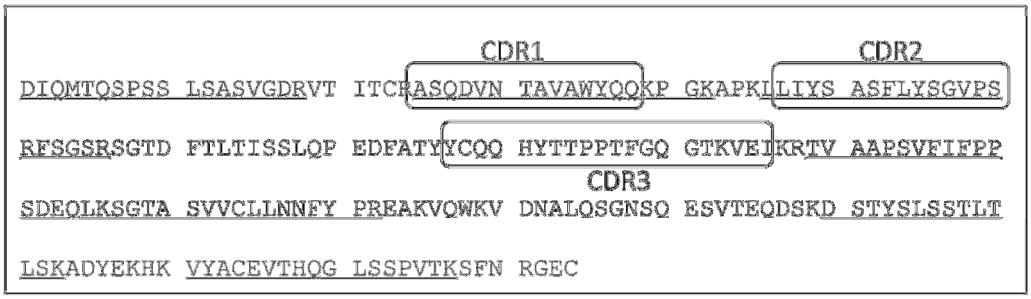


FIG. 12

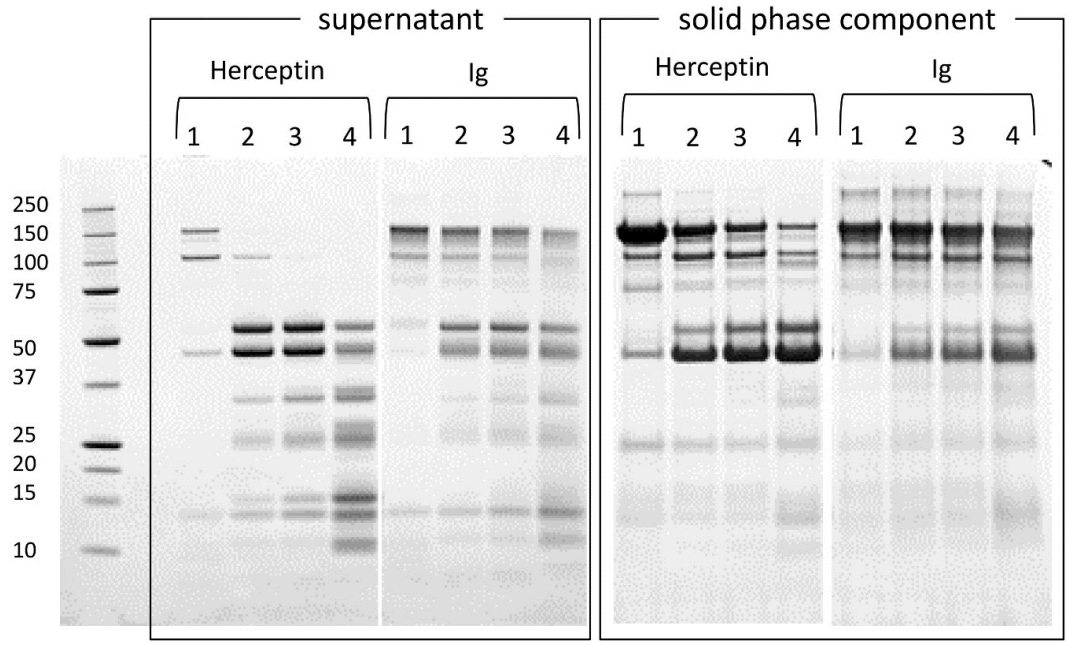
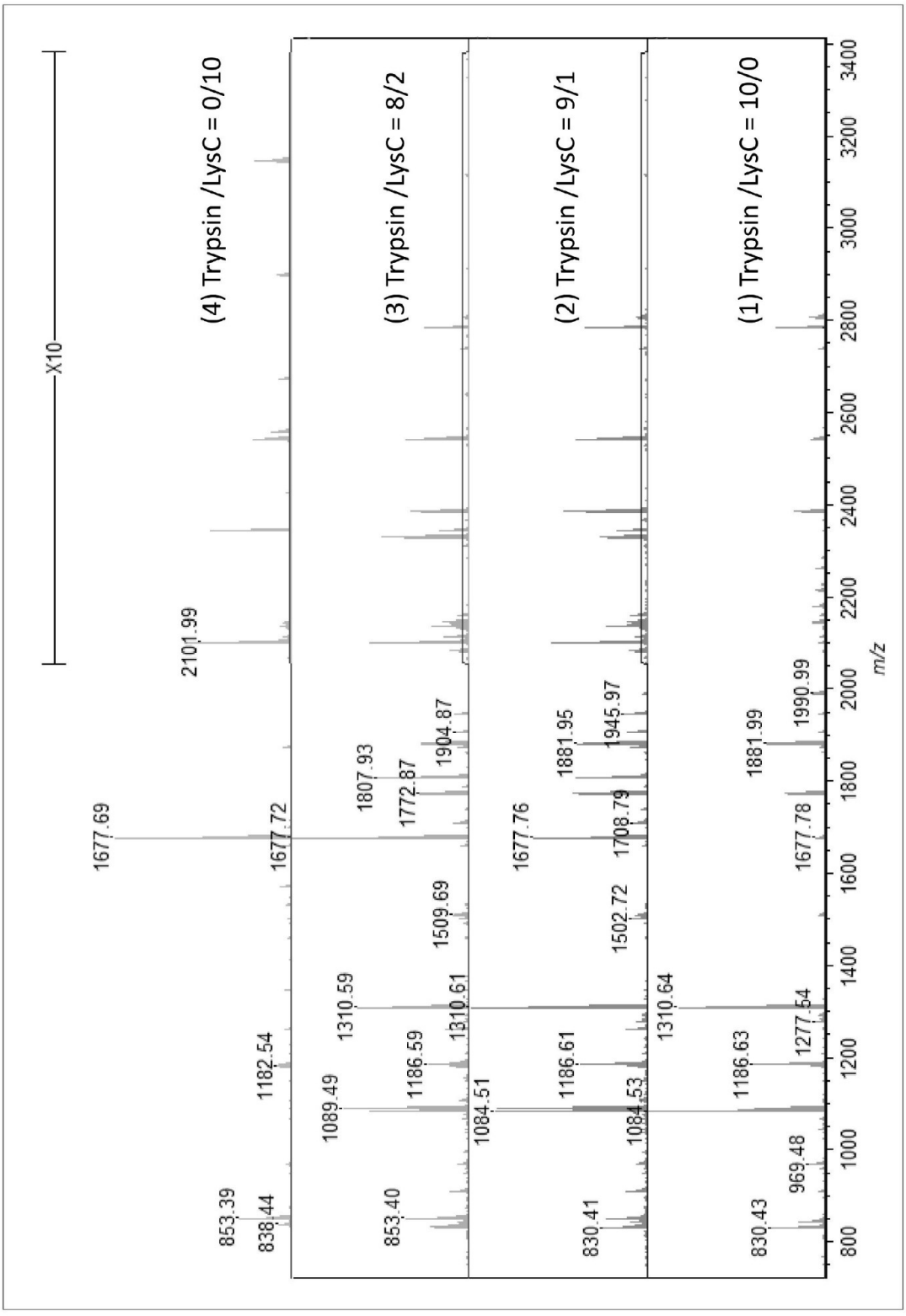


FIG. 13


X10
(4) Trypsin /LysC = 0/10
(3) Trypsin /LysC = 8/2
(2) Trypsin /LysC = 9/1
(1) Trypsin /LysC = 10/0
m/z
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200
3400
1677.69
2101.99
1677.72
1807.93
1772.87
1904.87
1509.69
1310.59
1310.61
1182.54
1186.59
1089.49
1084.51
853.39
838.44
853.40
1677.76
1881.95
1945.97
1708.79
1502.72
1310.64
1186.61
1084.53
830.41
1881.99
1990.99
1677.78
1277.54
1186.63
969.48
830.43

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<120> method for preparing peptide fragment, peptide fragment preparation kit therefor and analysis method

<130> WO13P062SZ

<160> 8

<170> PatentIn version 3.5

<210> 1

<211> 223

<212> PRT

<213> Artificial Sequence

<220>

<223> Trastuzumab (genetical recombination)

<400> 1

Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly

1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys Asp Thr

20 25 30

Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val

35 40 45

Ala Arg Ile Tyr Pro Thr Asn Gly Tyr Thr Arg Tyr Ala Asp Ser Val

50 55 60

Lys Gly Arg Phe Thr Ile Ser Ala Asp Thr Ser Lys Asn Thr Ala Tyr

65 70 75 80

Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys

85 90 95

Ser Arg Trp Gly Gly Asp Gly Phe Tyr Ala Met Asp Tyr Trp Gly Gln

100 105 110

Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val

115 120 125

Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala Ala

130 135 140

Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser

145 150 155 160

Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val

165 170 175

Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro

180 185 190

Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys

195 200 205

Pro Ser Asn Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys

210 215 220

<210> 2

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<223> Trastuzumab (genetical recombination)

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Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly

1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Val Asn Thr Ala

20 25 30

Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile

35 40 45

Tyr Ser Ala Ser Phe Leu Tyr Ser Gly Val Pro Ser Arg Phe Ser Gly

50 55 60

Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro

65 70 75 80

Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His Tyr Thr Thr Pro Pro

85 90 95

Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala

100 105 110

Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly

115 120 125

Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala

130 135 140

Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln

145 150 155 160

Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser

165 170 175

Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr

180 185 190

Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser

195 200 205

Phe Asn Arg Gly Glu Cys

210

<210> 3

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<223> Trastuzumab (genetical recombination)

<400> 3

Ser Gly Phe Asn Ile Lys Asp Thr Tyr Ile His Trp Val Arg

1 5 10

<210> 4

<211> 14

<212> PRT

<213> Artificial Sequence

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<223> Trastuzumab (genetical recombination)

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Trp Val Ala Arg Ile Tyr Pro Thr Asn Gly Tyr Thr Arg Tyr

1 5 10

<210> 5

<211> 17

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<223> Trastuzumab (genetical recombination)

<400> 5

Tyr Cys Ser Arg Trp Gly Gly Asp Gly Phe Tyr Ala Met Asp Tyr Trp

1 5 10 15

Gly

<210> 6

<211> 14

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<223> Trastuzumab (genetical recombination)

<400> 6

Ala Ser Gln Asp Val Asn Thr Ala Val Ala Trp Tyr Gln Gln

1 5 10

<210> 7

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<400> 7

Leu Ile Tyr Ser Ala Ser Phe Leu Tyr Ser Gly Val Pro Ser

1 5 10

<210> 8

<211> 20

<212> PRT

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<220>

<223> Trastuzumab (genetical recombination)

<400> 8

Tyr Cys Gln Gln His Tyr Thr Thr Pro Pro Thr Phe Gly Gln Gly Thr

1 5 10 15

Lys Val Glu Ile

20