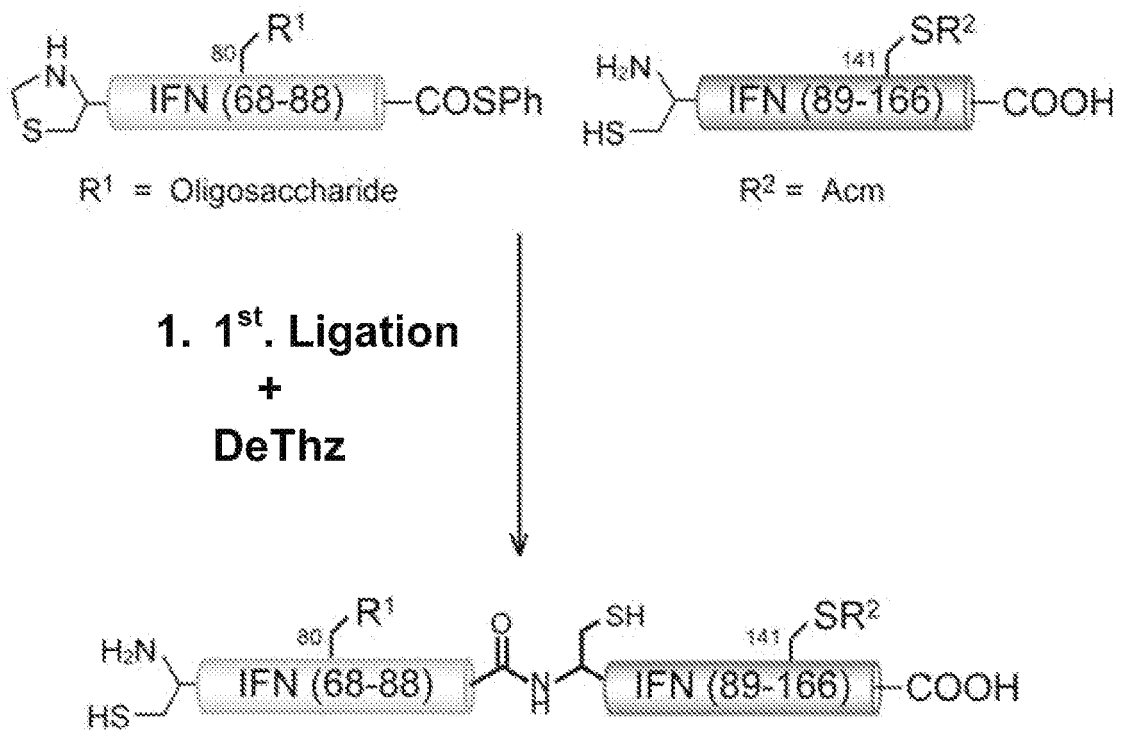
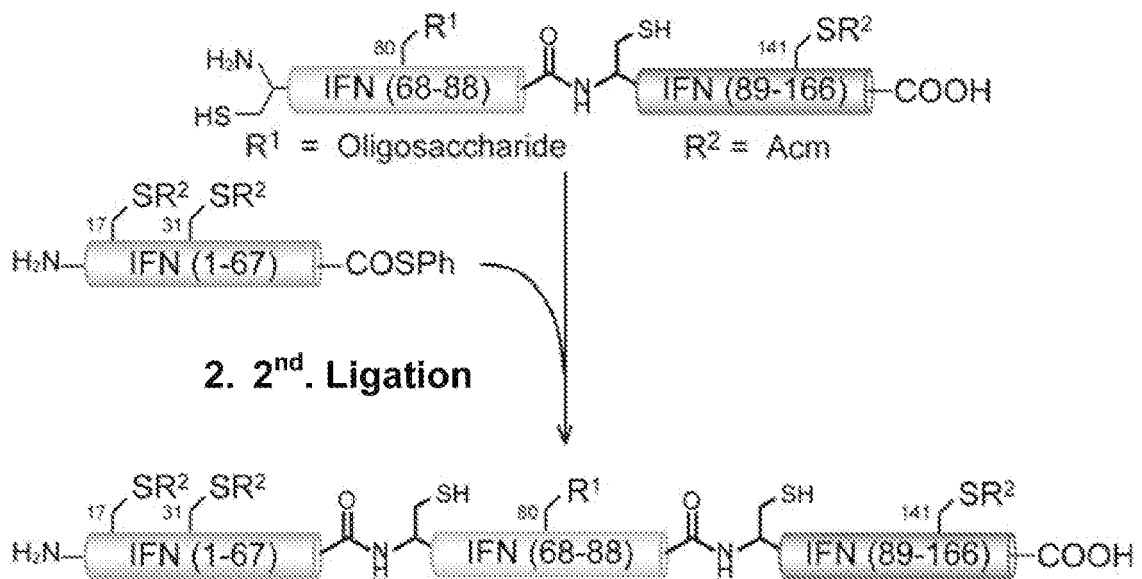


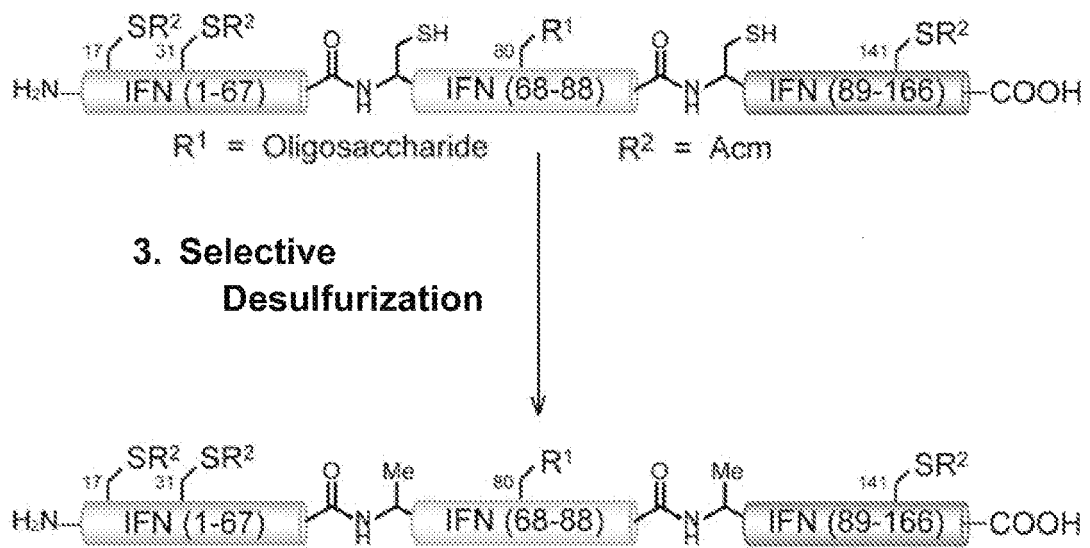
[図1]



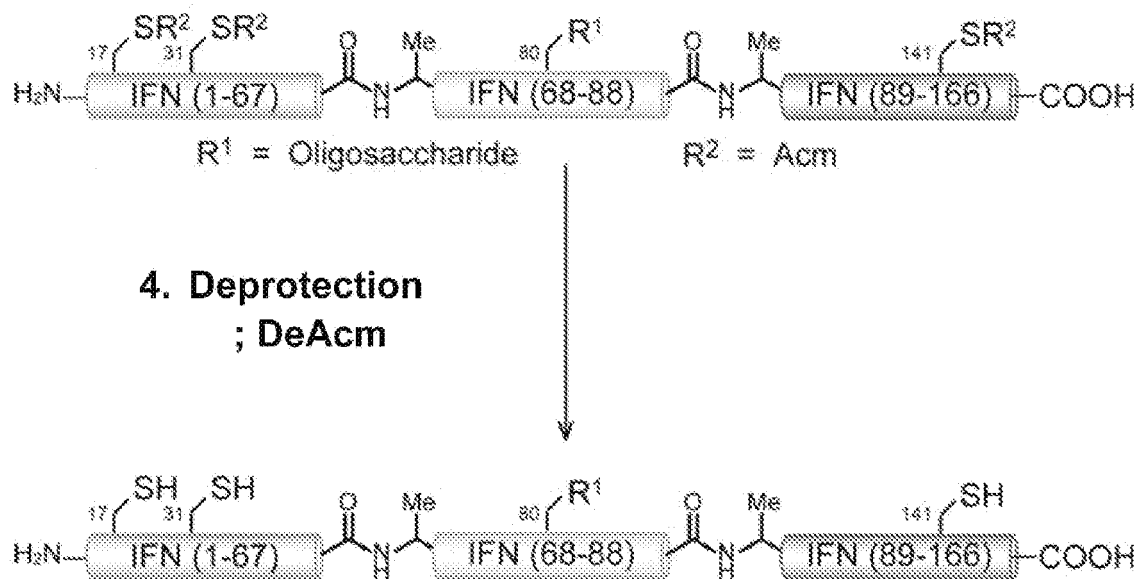
[図2]



[図3]

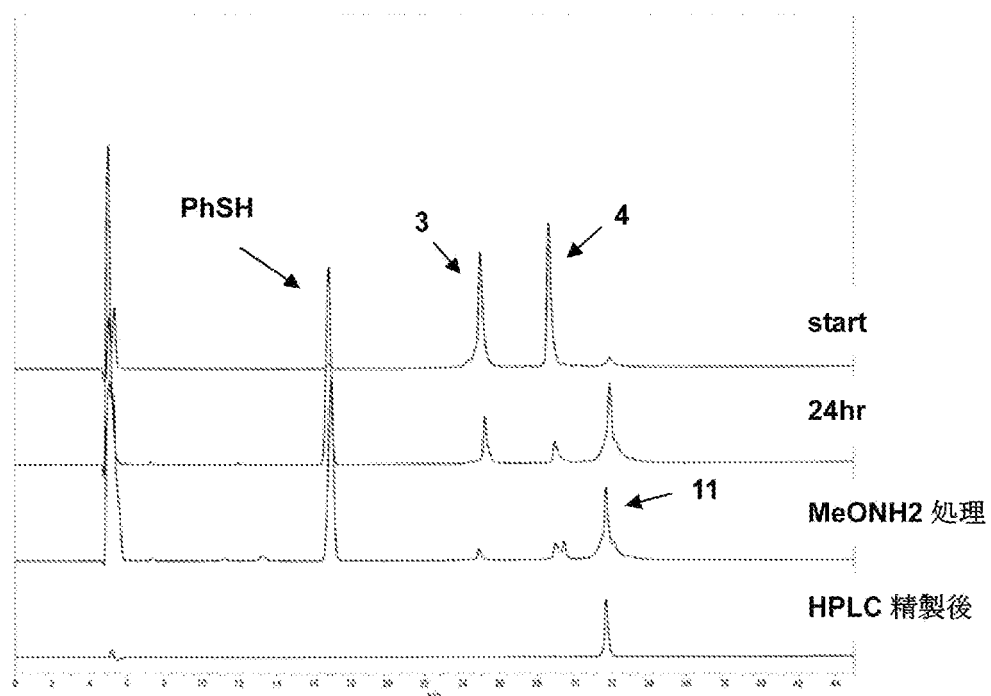


[図4]

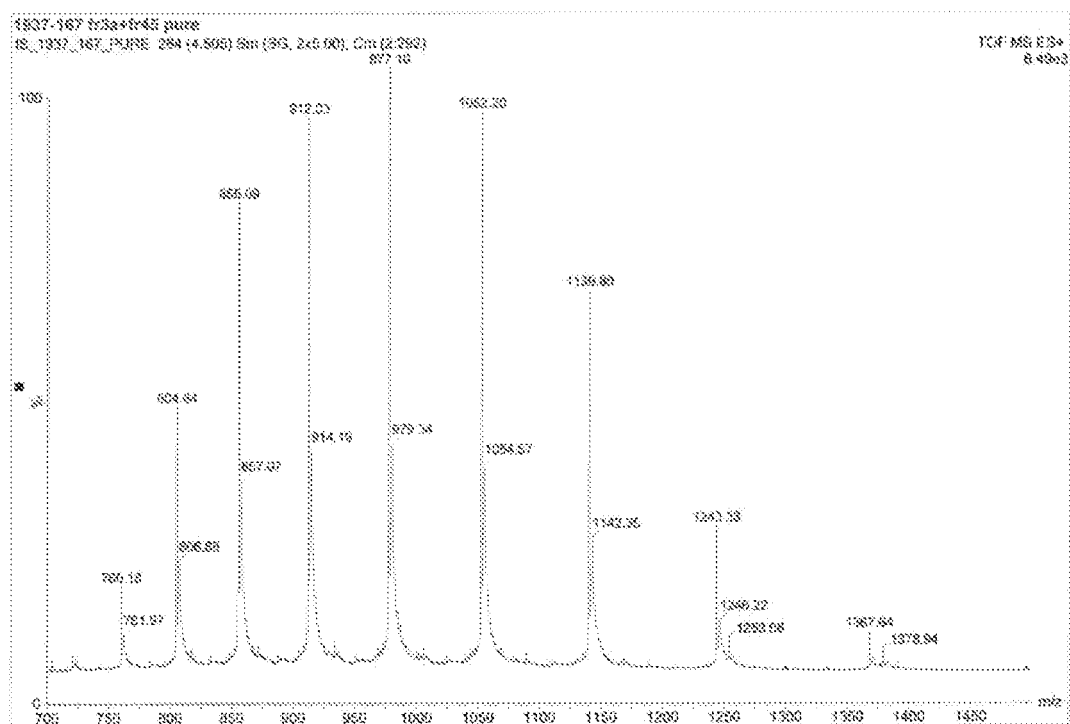


[図5]

A



B



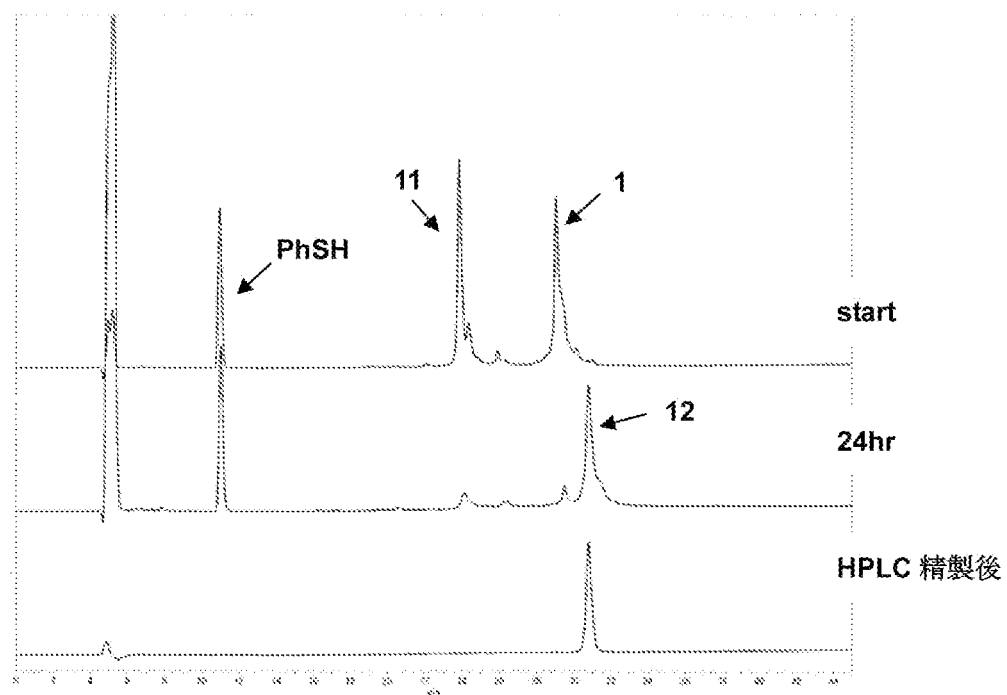
[図6]

ペプチドフラグメント (11) (配列番号:16)

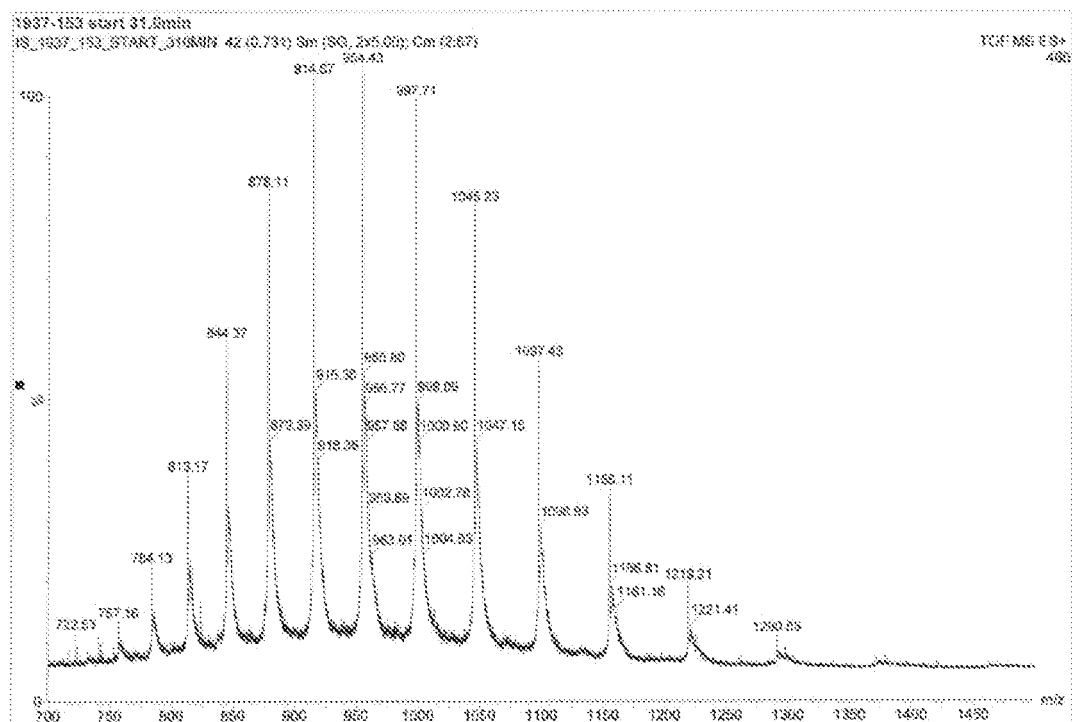
70
H₂N-Cys-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
80
Asn(asialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-Cys-
90
Asn-Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-
100
Leu-Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-
110
Leu-Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-
120
Ser-His-Cys(Acm)-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-
130
Phe-Tyr-Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H

[図7]

A



B



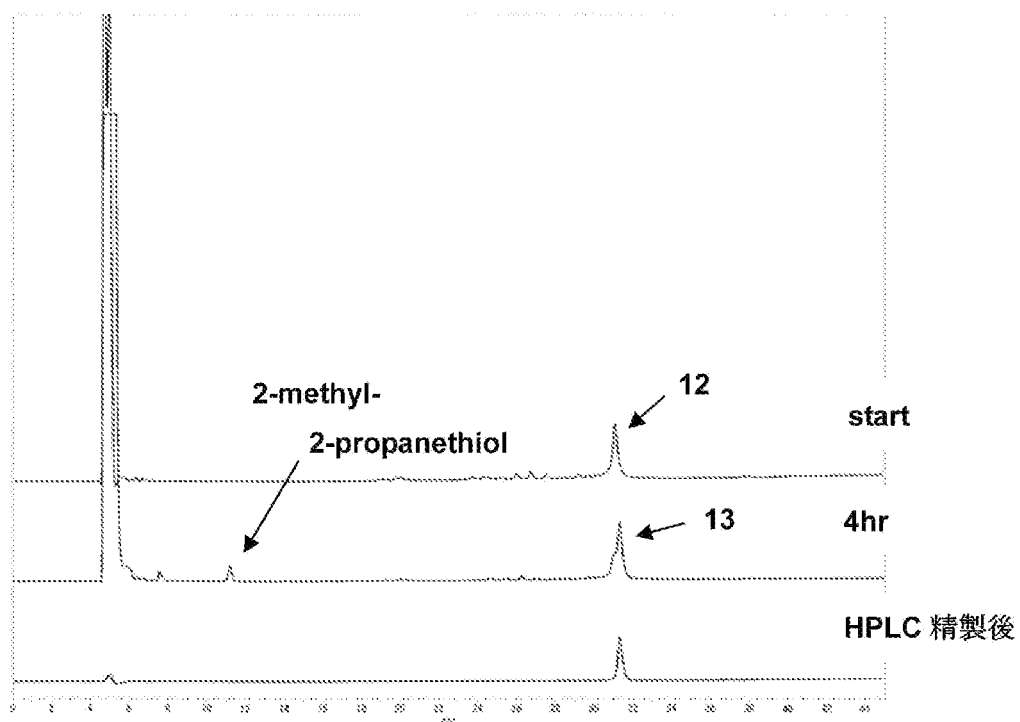
[図8]

ポリペプチド (12) (配列番号: 17)

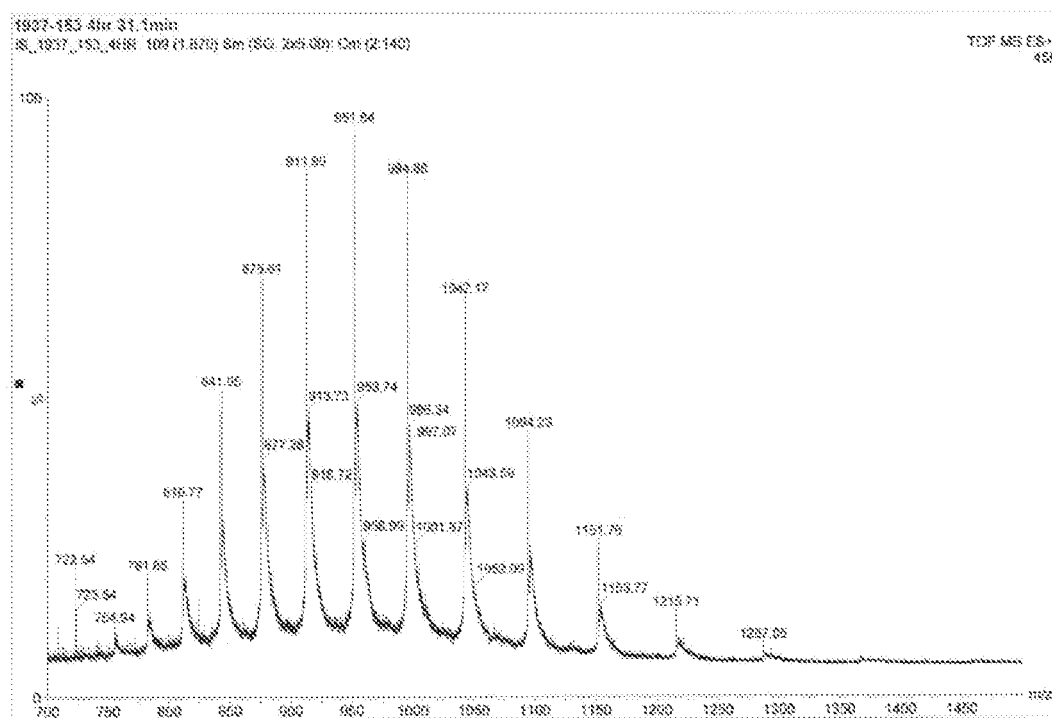
¹
H₂N-Met-Ser-Tyr-Asn-Leu-Leu-Gly-Phe-Leu-Gln-Arg-Ser-Ser-Asn-Phe-
¹⁰
²⁰
Gln-Cys(Acm)-Gln-Lys-Leu-Leu-Trp-Gln-Leu-Asn-Gly-Arg-Leu-Glu-Tyr-
³⁰
⁴⁰
Cys(Acm)-Leu-Lys-Asp-Arg-Met-Asn-Phe-Asp-Ile-Pro-Glu-Glu-Ile-Lys-
⁵⁰
⁶⁰
Gln-Leu-Gln-Gln-Phe-Gln-Lys-Glu-Asp-Ala-Ala-Leu-Thr-Ile-Tyr-Glu-Met-
⁷⁰
Leu-Gln-Asn-Ile-Phe-Cys-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
⁸⁰
Asn(asialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-
⁹⁰
¹⁰⁰
Cys-Asn-Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-
¹¹⁰
¹²⁰
Leu-Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-
¹³⁰
Leu-Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-
¹⁴⁰
¹⁵⁰
Ser-His-Cys(Acm)-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-Phe-
¹⁶⁰
Tyr-Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H

[図9]

A



B



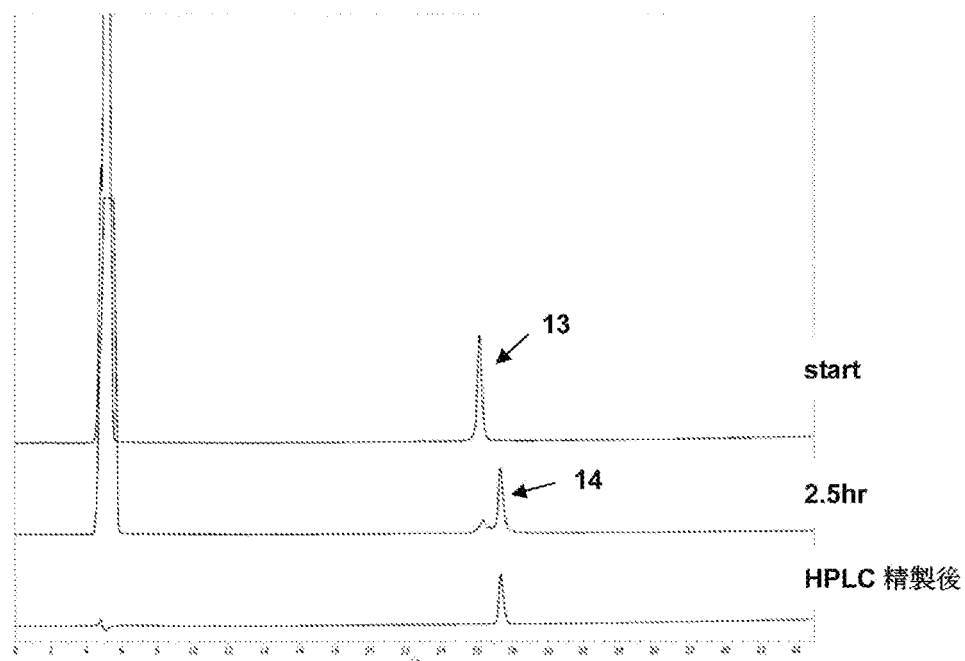
[図10]

ポリペプチド (13) (配列番号: 18)

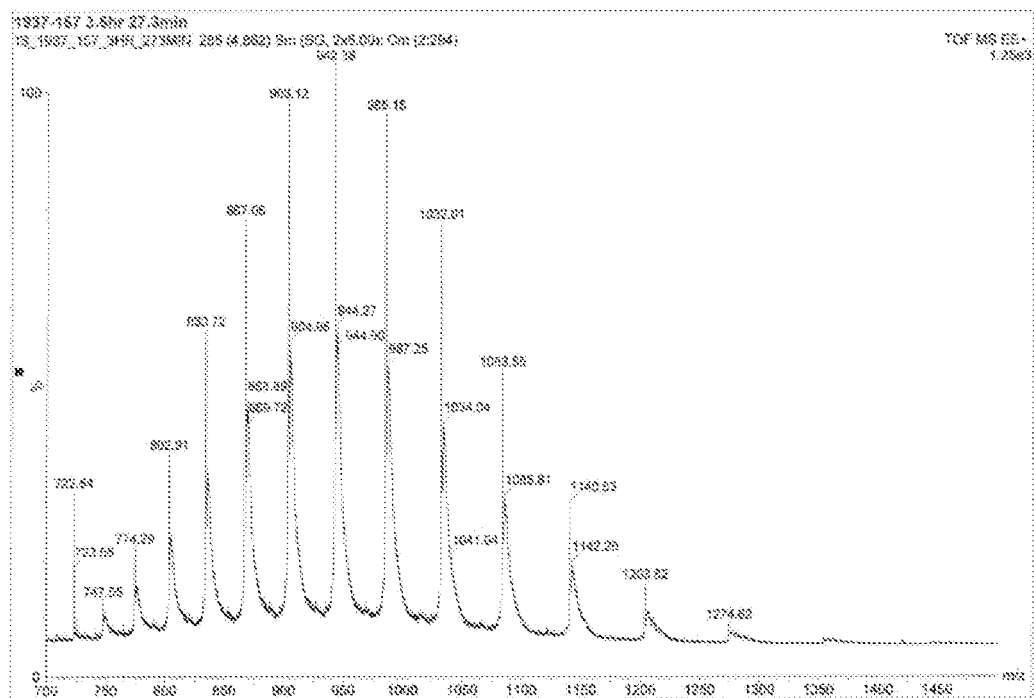
1 10
H₂N-Met-Ser-Tyr-Asn-Leu-Leu-Gly-Phe-Leu-Gln-Arg-Ser-Ser-Asn-Phe-
20 30
Gln-Cys(Acm)-Gln-Lys-Leu-Leu-Trp-Gln-Leu-Asn-Gly-Arg-Leu-Glu-Tyr-
40
Cys(Acm)-Leu-Lys-Asp-Arg-Met-Asn-Phe-Asp-Ile-Pro-Glu-Glu-Ile-Lys-
50 60
Gln-Leu-Gln-Gln-Phe-Gln-Lys-Glu-Asp-Ala-Ala-Leu-Thr-Ile-Tyr-Glu-Met-
70
Leu-Gln-Asn-Ile-Phe-Ala-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
80
Asn(asialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-
90 100
Ala-Asn-Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-
110 120
Leu-Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-
130
Leu-Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-
140 150
Ser-His-Cys(Acm)-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-Phe-
160
Tyr-Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H

[図11]

A



B

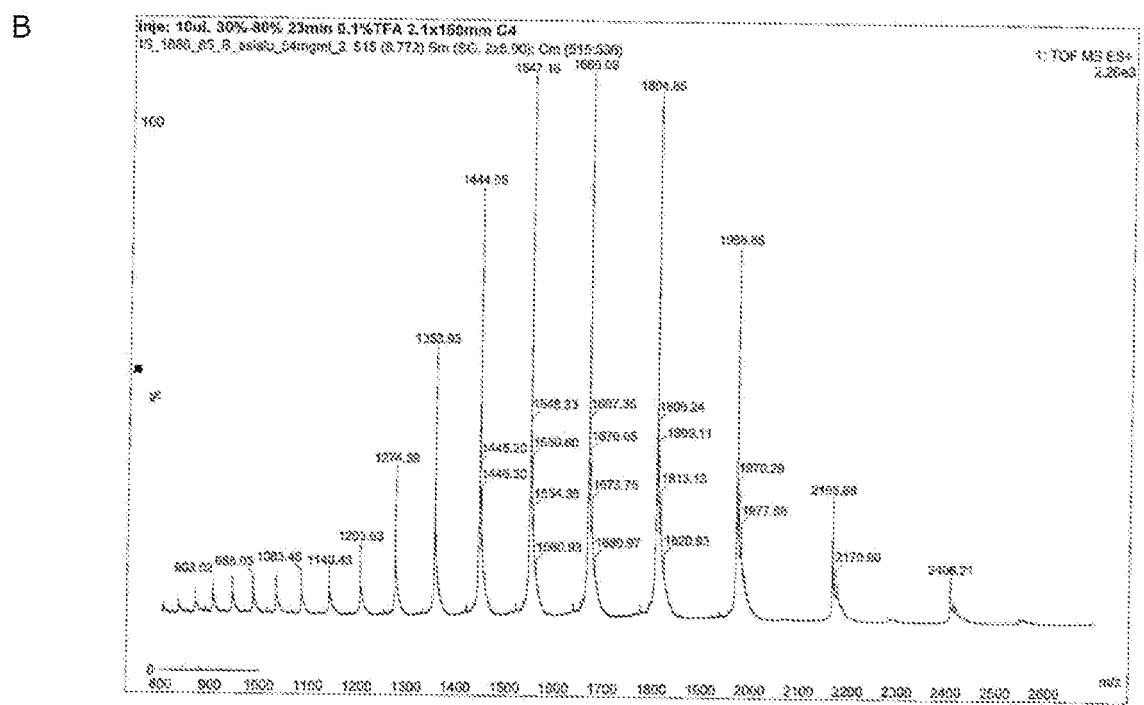
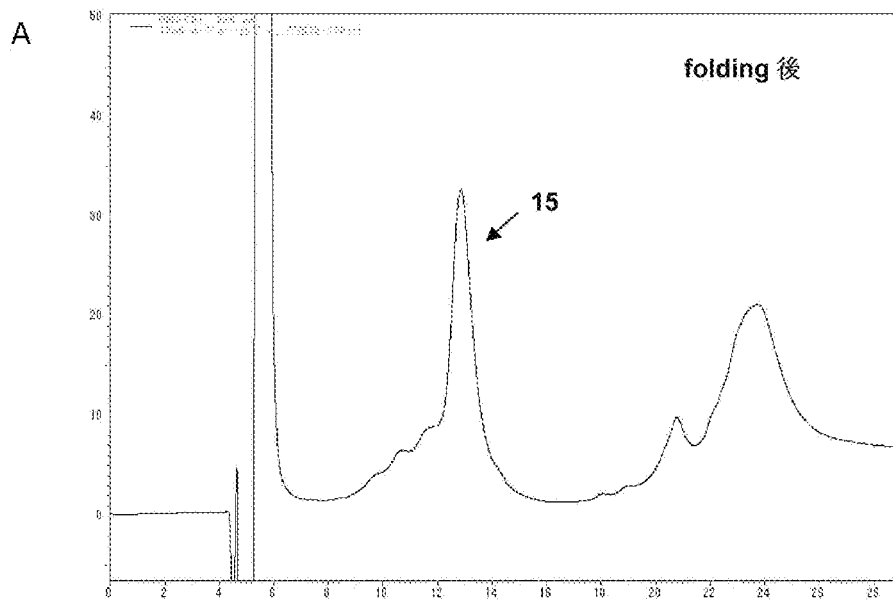


[図12]

ポリペプチド (14) (配列番号 : 19)

1 10
H₂N-Met-Ser-Tyr-Asn-Leu-Leu-Gly-Phe-Leu-Gln-Arg-Ser-Ser-Asn-Phe-
20 30
Gln-Cys-Gln-Lys-Leu-Leu-Trp-Gln-Leu-Asn-Gly-Arg-Leu-Glu-Tyr-Cys-
40
Leu-Lys-Asp-Arg-Met-Asn-Phe-Asp-Ile-Pro-Glu-Glu-Ile-Lys-Gln-Leu-
50 60
Gln-Gln-Phe-Gln-Lys-Glu-Asp-Ala-Ala-Leu-Thr-Ile-Tyr-Glu-Met-Leu-
70
Gln-Asn-Ile-Phe-Ala-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
80
Asn(asialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-Ala-
90 100
Asn-Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-
110 120
Leu-Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-
130
Leu-Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-
140 150
Ser-His-Cys-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-Phe-
160
Tyr-Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H

[図13]

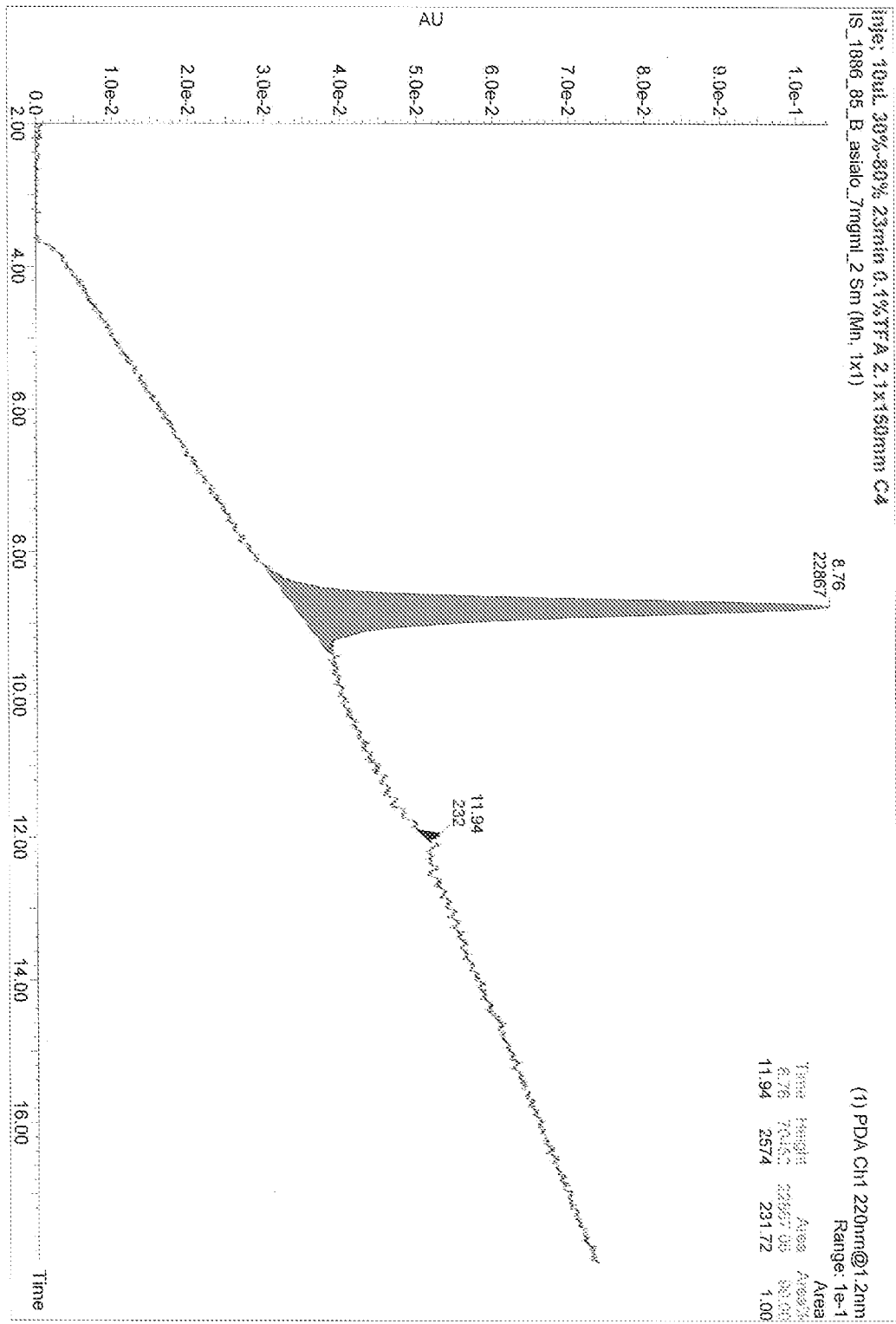


[図14]

ポリペプチド (15) (配列番号: 20)

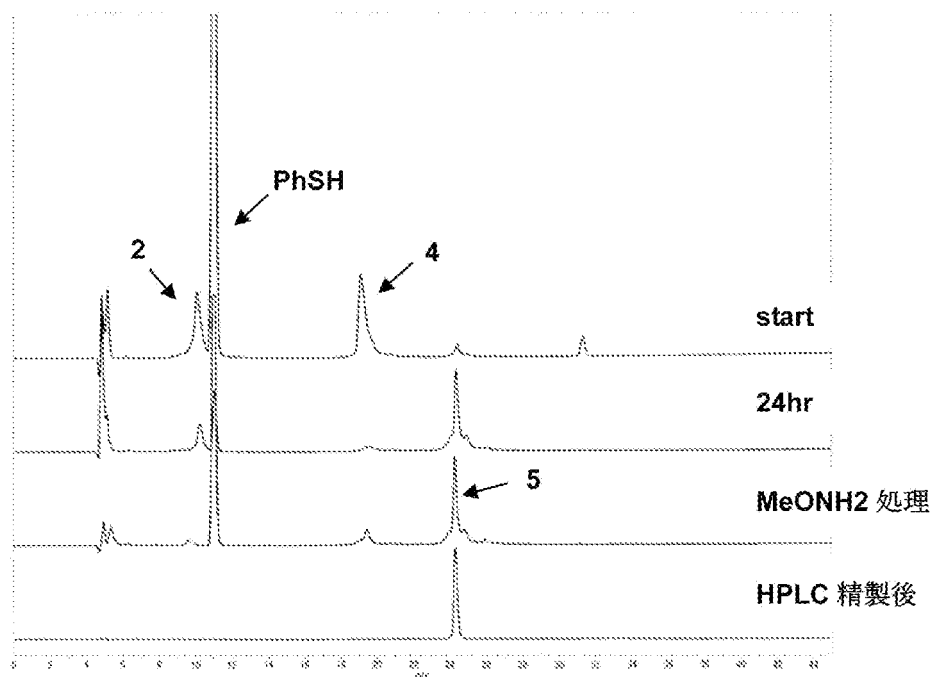


[図15]

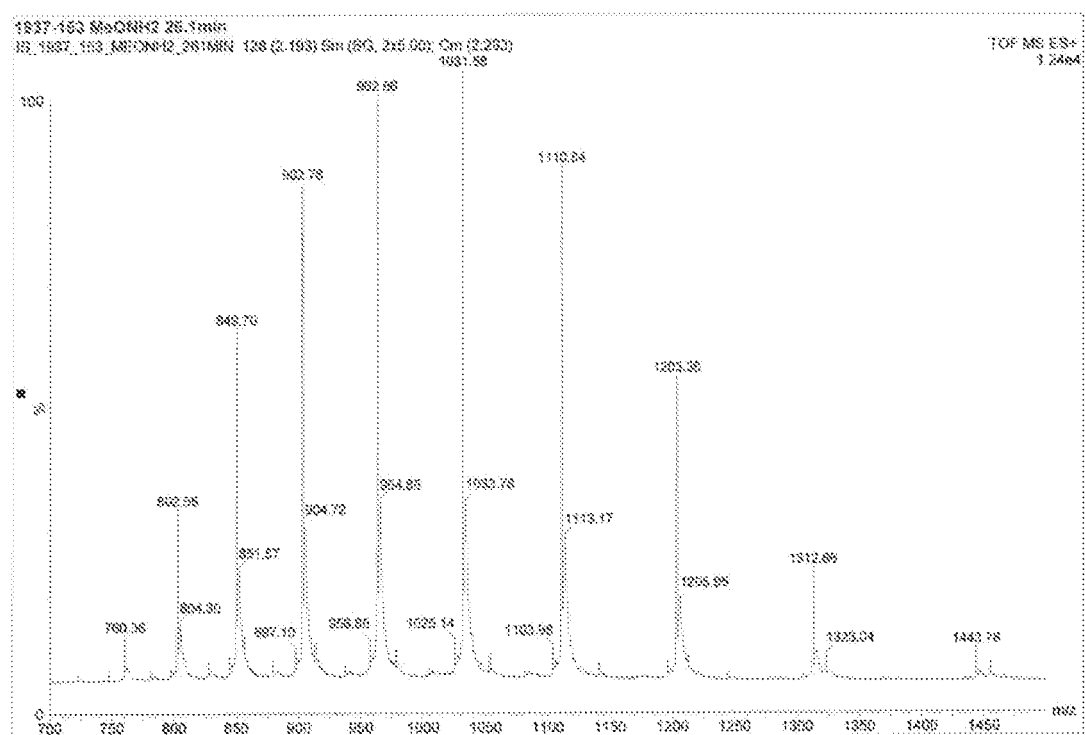


[図16]

A



B



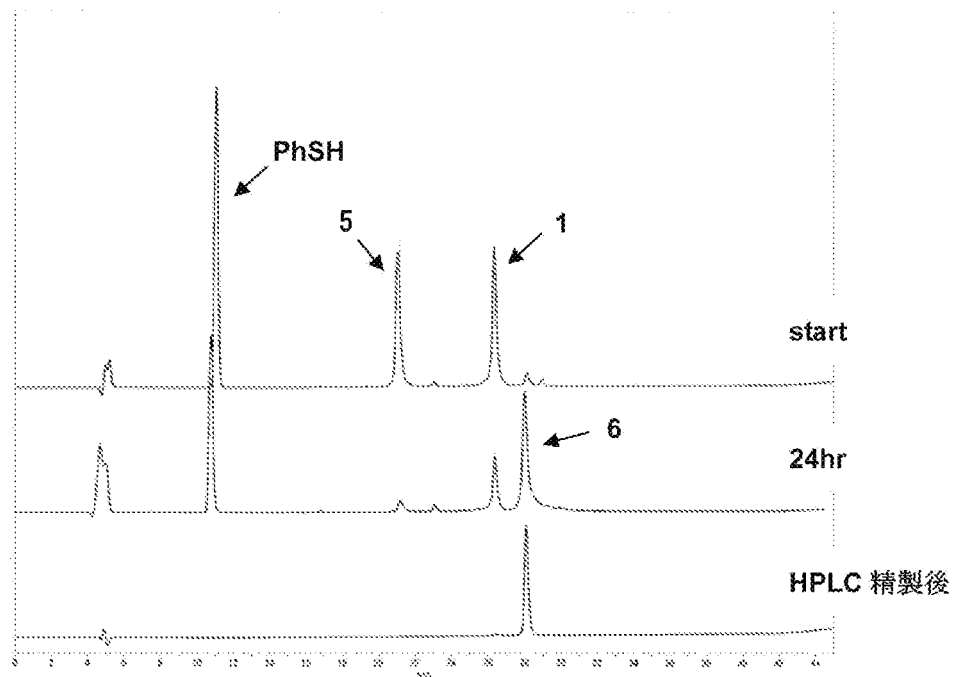
[図17]

ペプチドフラグメント (5) (配列番号: 21)

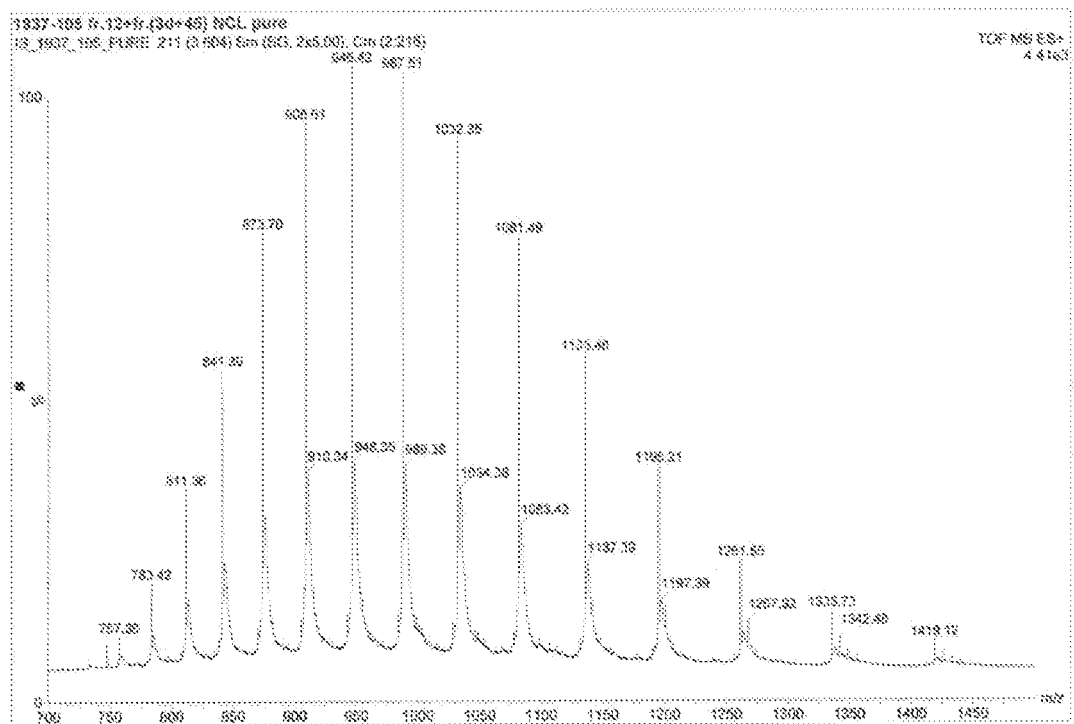
70
H₂N-Cys-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
80
Asn(protected sialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-
90
Cys-Asn-Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-
100
Leu-Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-
110
Leu-Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-
120
Ser-His-Cys(Acm)-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-Phe-
130
Tyr-Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H

[図18]

A



B



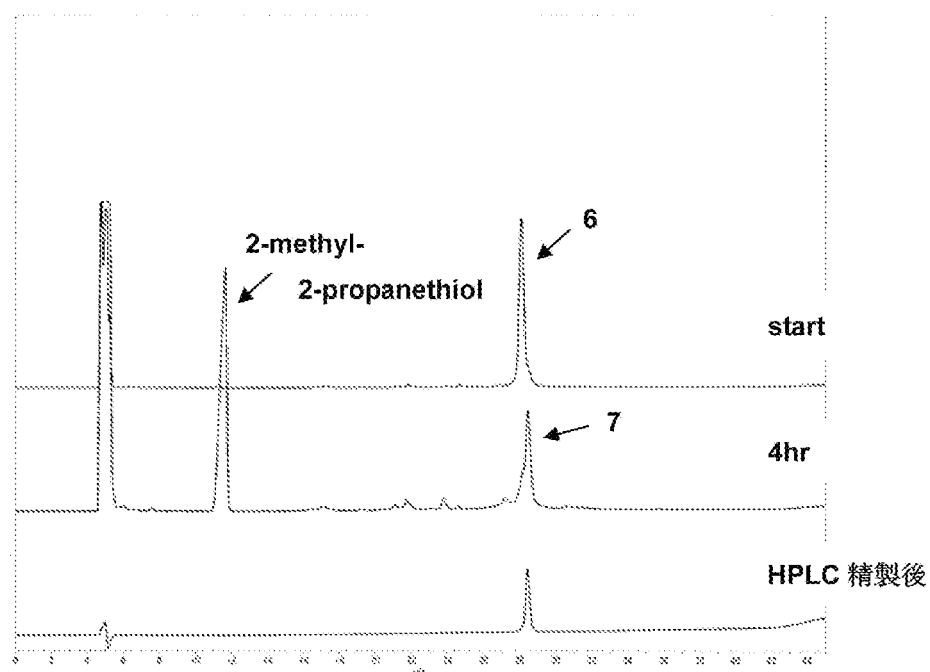
[図19]

ポリペプチド (6) (配列番号: 22)

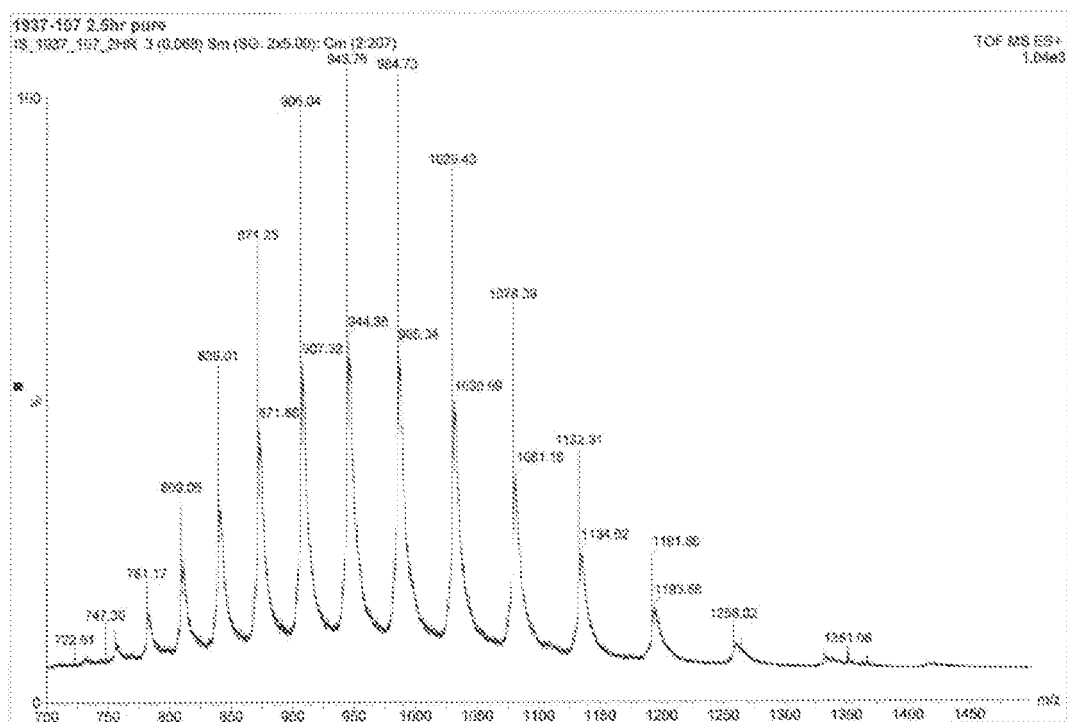
¹
H₂N-Met-Ser-Tyr-Asn-Leu-Leu-Gly-Phe-Leu-Gln-Arg-Ser-Ser-Asn-Phe-
¹⁰
Gln-Cys(Acm)-Gln-Lys-Leu-Leu-Trp-Gln-Leu-Asn-Gly-Arg-Leu-Glu-Tyr-
²⁰ ³⁰
Cys(Acm)-Leu-Lys-Asp-Arg-Met-Asn-Phe-Asp-Ile-Pro-Glu-Glu-Ile-Lys-Gln-
⁴⁰
Leu-Gln-Gln-Phe-Gln-Lys-Glu-Asp-Ala-Ala-Leu-Thr-Ile-Tyr-Glu-Met-Leu-
⁵⁰ ⁶⁰
Gln-Asn-Ile-Phe-Cys-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
⁷⁰
Asn(protected sialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-
⁸⁰
Cys-Asn-Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-
⁹⁰ ¹⁰⁰
Leu-Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-
¹¹⁰ ¹²⁰
Leu-Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-
¹³⁰
Ser-His-Cys(Acm)-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-Phe-
¹⁴⁰ ¹⁵⁰
Tyr-Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H
¹⁶⁰

[図20]

A



B



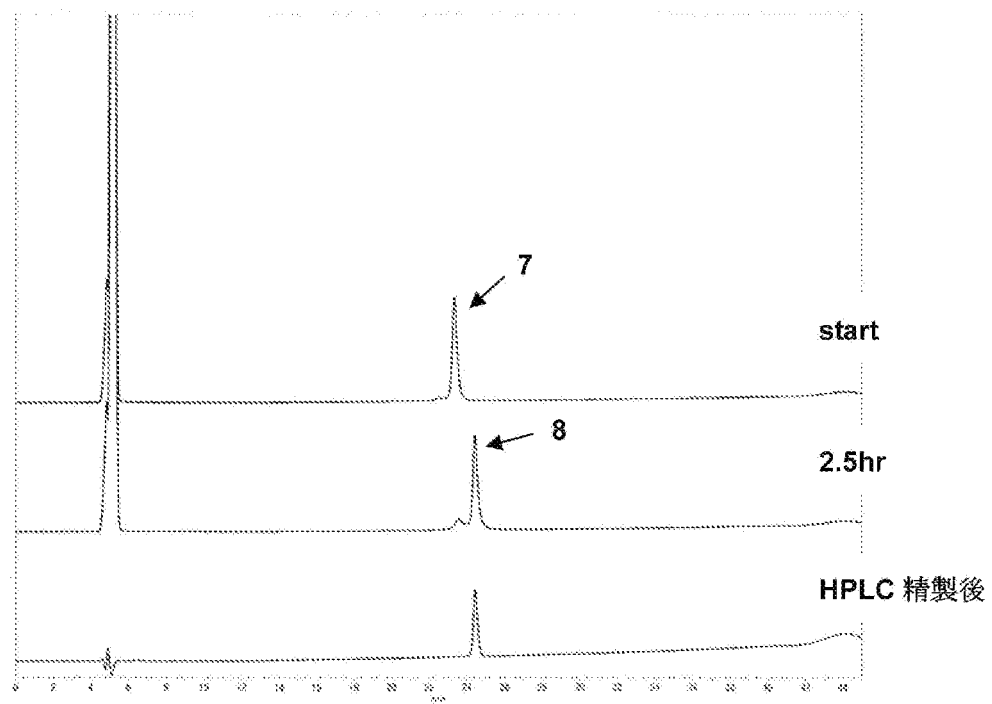
[図21]

ポリペプチド (7) (配列番号: 23)

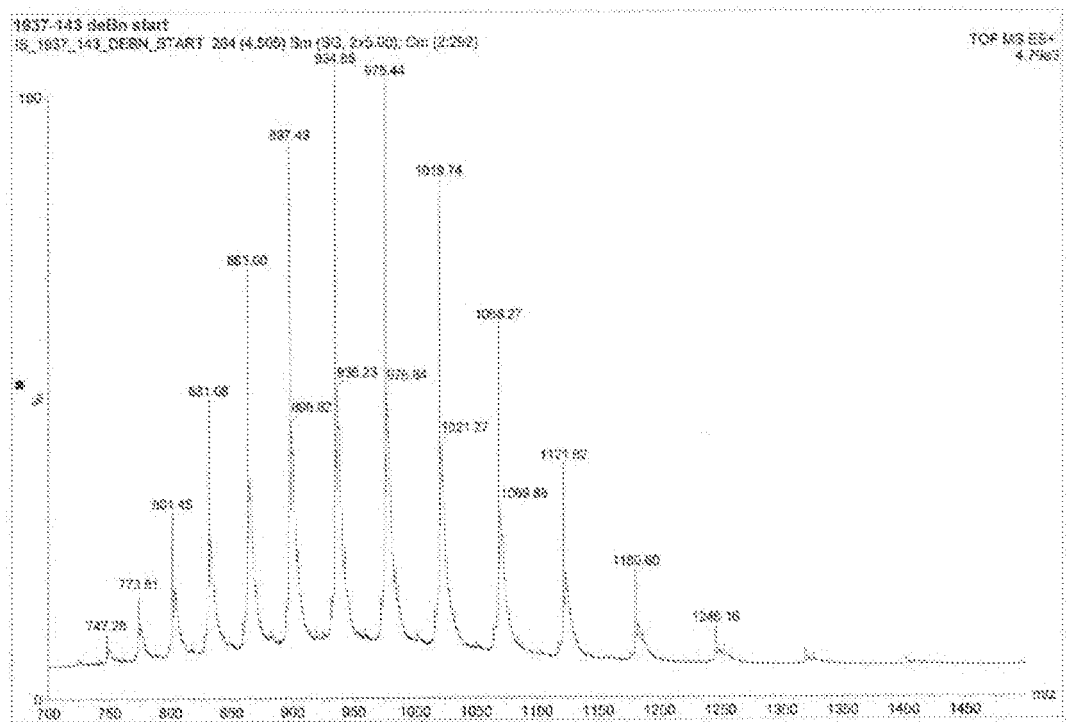
¹
H₂N-Met-Ser-Tyr-Asn-Leu-Leu-Gly-Phe-Leu-Gln-Arg-Ser-Ser-Asn-Phe-¹⁰
²⁰
Gln-Cys(Acm)-Gln-Lys-Leu-Leu-Trp-Gln-Leu-Asn-Gly-Arg-Leu-Glu-Tyr-³⁰
⁴⁰
Cys(Acm)-Leu-Lys-Asp-Arg-Met-Asn-Phe-Asp-Ile-Pro-Glu-Glu-Ile-Lys-Gln-
⁵⁰
Leu-Gln-Gln-Phe-Gln-Lys-Glu-Asp-Ala-Ala-Leu-Thr-Ile-Tyr-Glu-Met-Leu-⁶⁰
⁷⁰
Gln-Asn-Ile-Phe-Ala-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
⁸⁰
Asn(protected sialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-
⁹⁰
Ala-Asn-Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-¹⁰⁰
¹¹⁰
Leu-Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-¹²⁰
¹³⁰
Leu-Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-
¹⁴⁰
Ser-His-Cys(Acm)-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-Phe-¹⁵⁰
¹⁶⁰
Tyr-Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H

[図22]

A



B



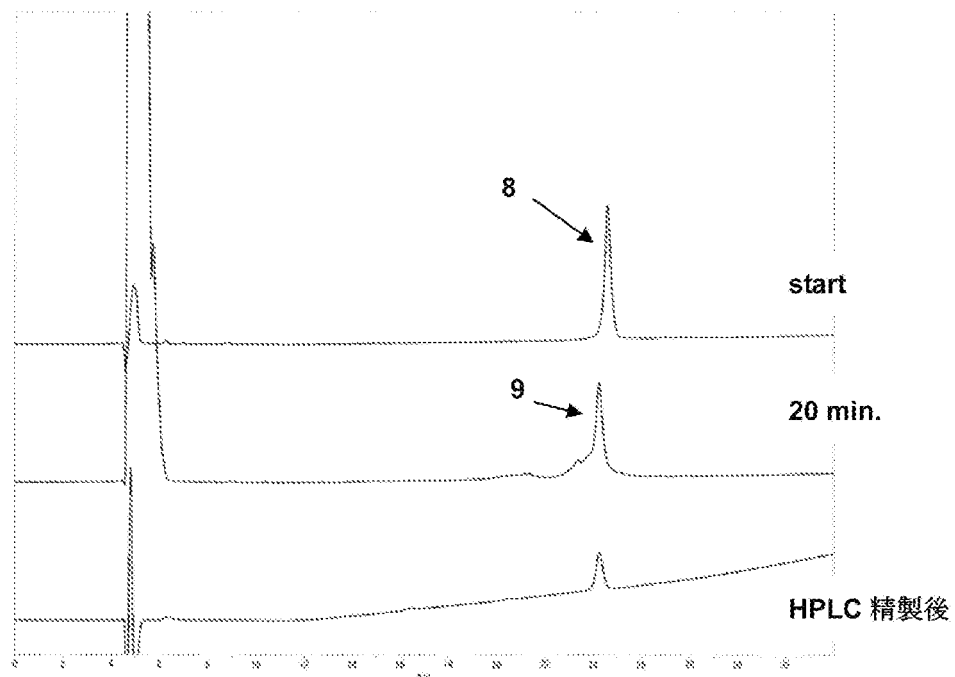
[図23]

ポリペプチド (8) (配列番号 : 2 4)

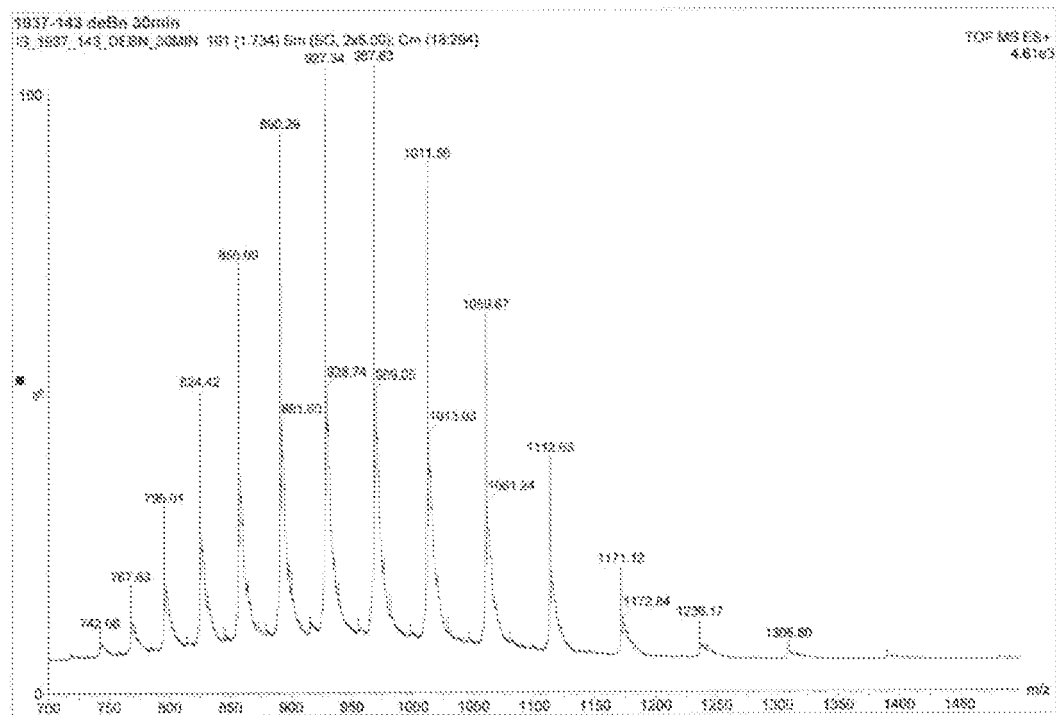
¹
 H₂N-Met-Ser-Tyr-Asn-Leu-Leu-Gly-Phe-Leu-Gln-Arg-Ser-Ser-Asn-Phe-
¹⁰
²⁰
 Gln-Cys-Gln-Lys-Leu-Leu-Trp-Gln-Leu-Asn-Gly-Arg-Leu-Glu-Tyr-Cys-
³⁰
⁴⁰
 Leu-Lys-Asp-Arg-Met-Asn-Phe-Asp-Ile-Pro-Glu-Glu-Ile-Lys-Gln-Leu-
⁵⁰
⁶⁰
 Gln-Gln-Phe-Gln-Lys-Glu-Asp-Ala-Ala-Leu-Thr-Ile-Tyr-Glu-Met-Leu-
⁷⁰
 Gln-Asn-Ile-Phe-Ala-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
⁸⁰
 Asn(protected sialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-
⁹⁰
¹⁰⁰
 Ala-Asn-Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-
¹¹⁰
¹²⁰
 Leu-Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-
¹³⁰
 Leu-Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-
¹⁴⁰
¹⁵⁰
 Ser-His-Cys-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-Phe-
¹⁶⁰
 Tyr-Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H

[図24]

A



B

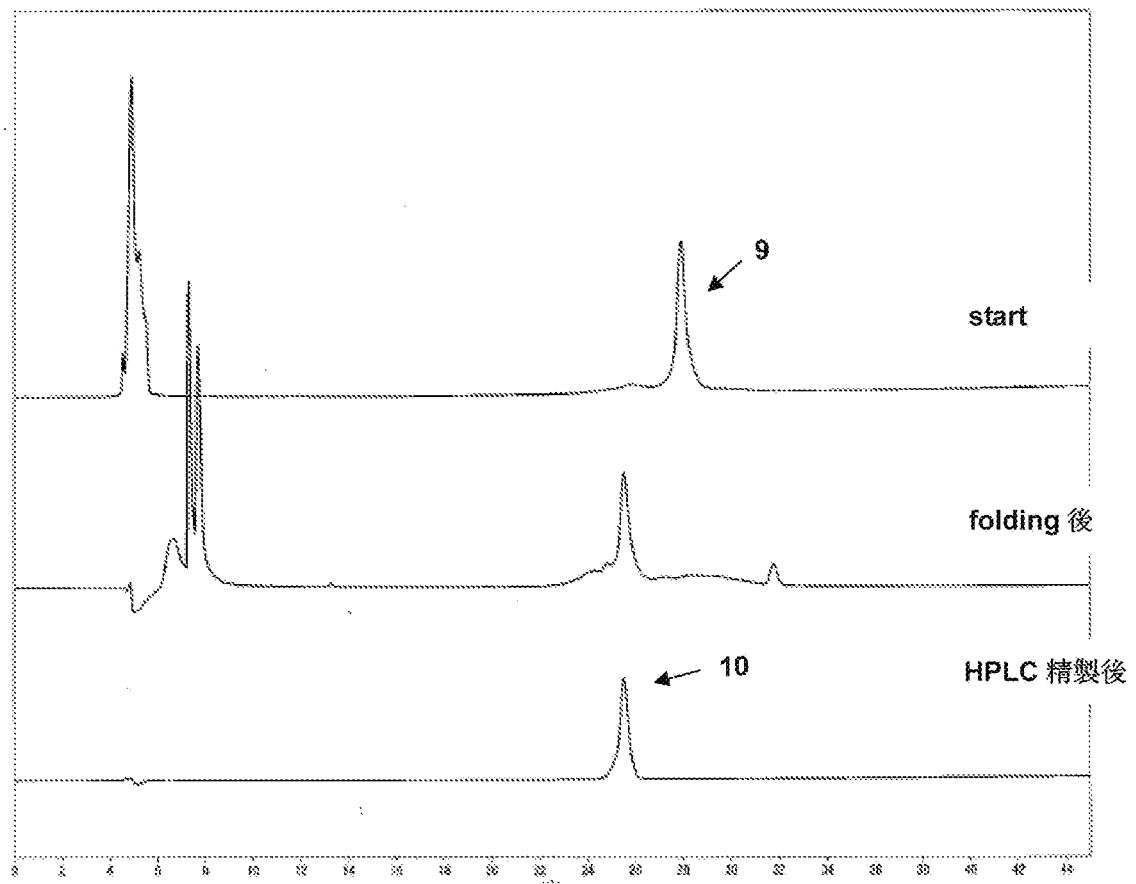


[図25]

ポリペプチド (9) (配列番号 : 25)

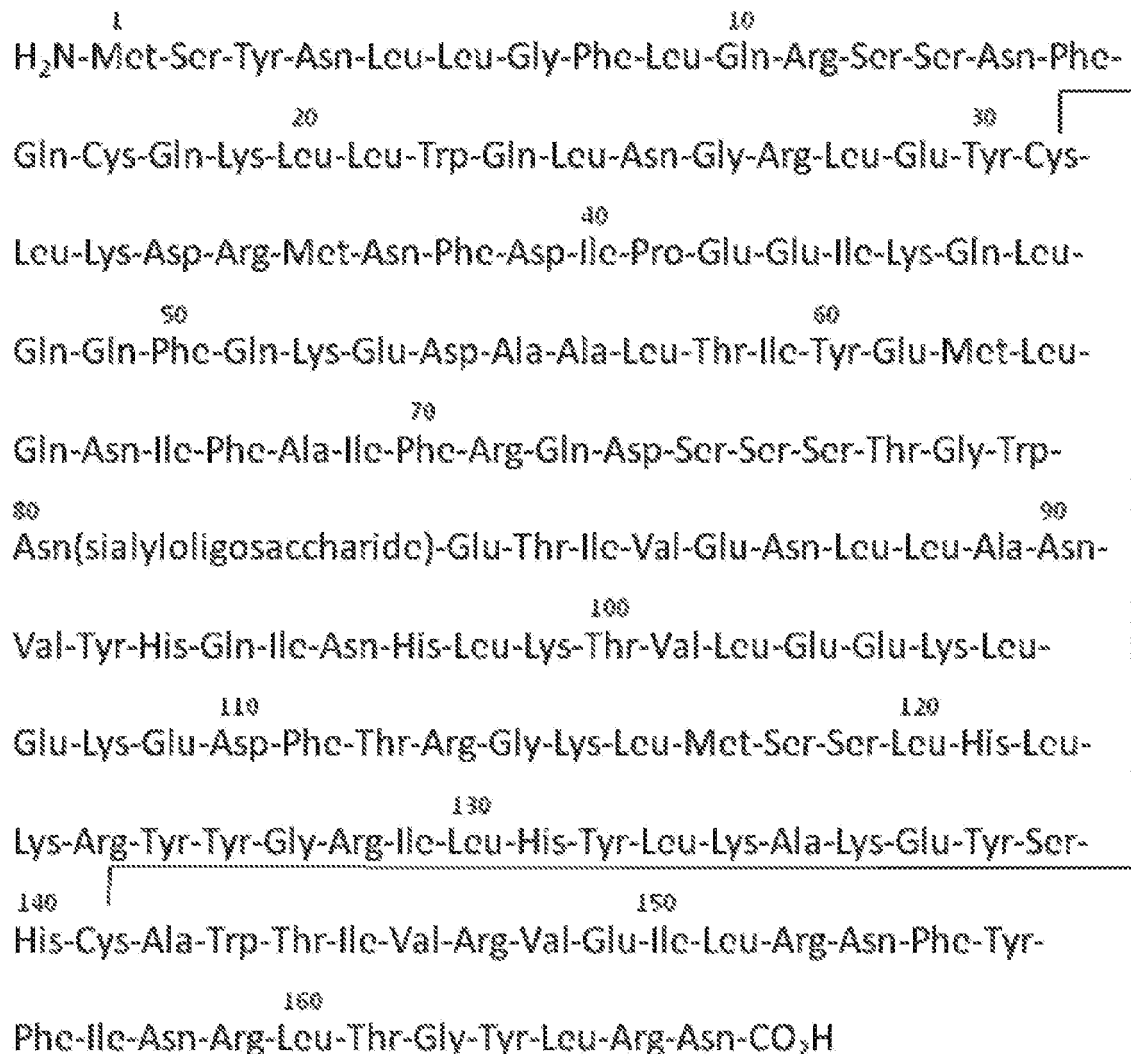
1 10
H₂N-Met-Ser-Tyr-Asn-Leu-Leu-Gly-Phe-Leu-Gln-Arg-Ser-Ser-Asn-Phe-
20 30
Gln-Cys-Gln-Lys-Leu-Leu-Trp-Gln-Leu-Asn-Gly-Arg-Leu-Glu-Tyr-Cys-
40
Leu-Lys-Asp-Arg-Met-Asn-Phe-Asp-Ile-Pro-Glu-Glu-Ile-Lys-Gln-Leu-
50 60
Gln-Gln-Phe-Gln-Lys-Glu-Asp-Ala-Ala-Leu-Thr-Ile-Tyr-Glu-Met-Leu-
70
Gln-Asn-Ile-Phe-Ala-Ile-Phe-Arg-Gln-Asp-Ser-Ser-Ser-Thr-Gly-Trp-
80 90
Asn(sialyloligosaccharide)-Glu-Thr-Ile-Val-Glu-Asn-Leu-Leu-Ala-Asn-
100
Val-Tyr-His-Gln-Ile-Asn-His-Leu-Lys-Thr-Val-Leu-Glu-Glu-Lys-Leu-
110 120
Glu-Lys-Glu-Asp-Phe-Thr-Arg-Gly-Lys-Leu-Met-Ser-Ser-Leu-His-Leu-
130
Lys-Arg-Tyr-Tyr-Gly-Arg-Ile-Leu-His-Tyr-Leu-Lys-Ala-Lys-Glu-Tyr-Ser-
140 150
His-Cys-Ala-Trp-Thr-Ile-Val-Arg-Val-Glu-Ile-Leu-Arg-Asn-Phe-Tyr-
160
Phe-Ile-Asn-Arg-Leu-Thr-Gly-Tyr-Leu-Arg-Asn-CO₂H

[図26]

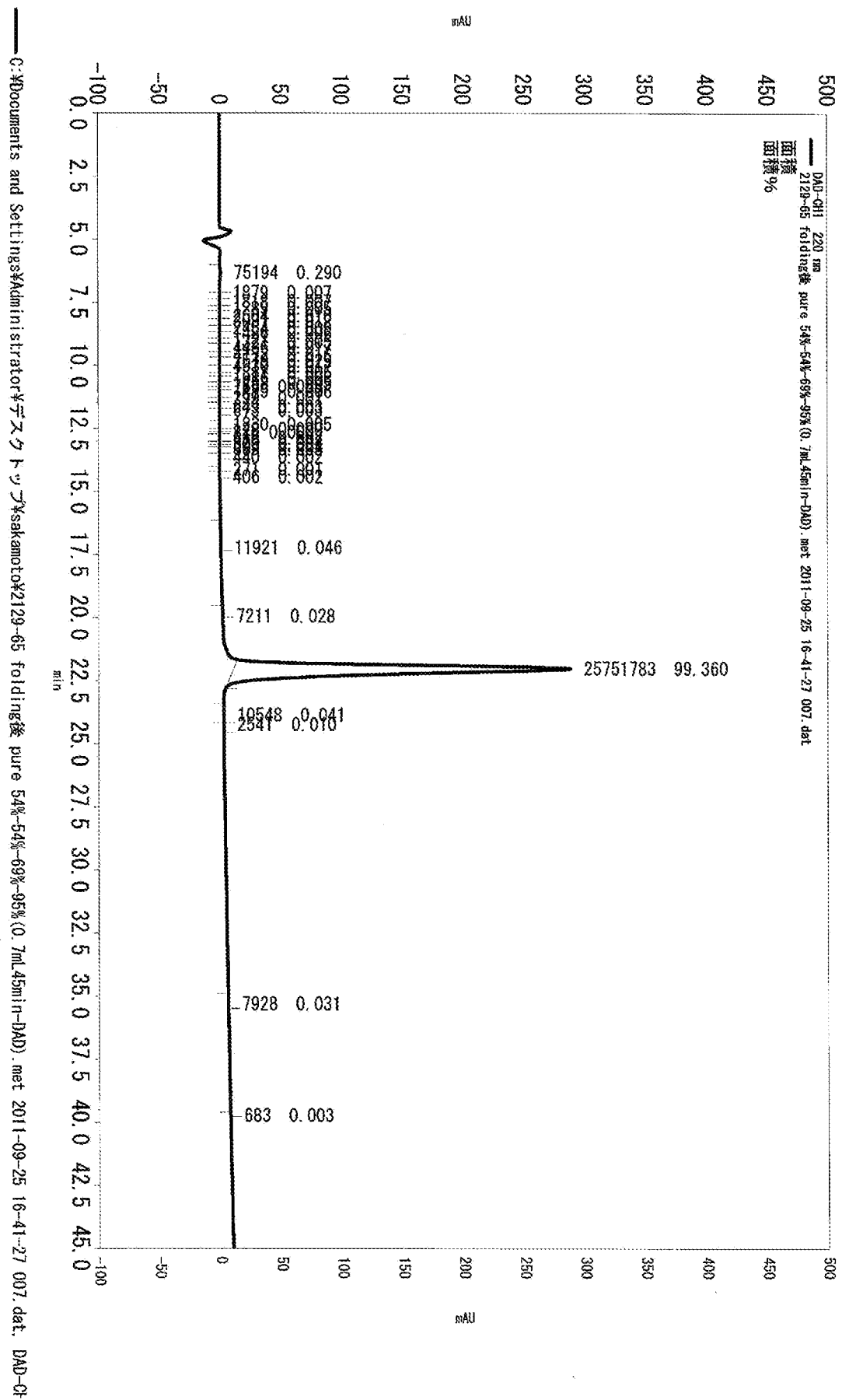


[図27]

ポリペプチド (10) (配列番号: 26)

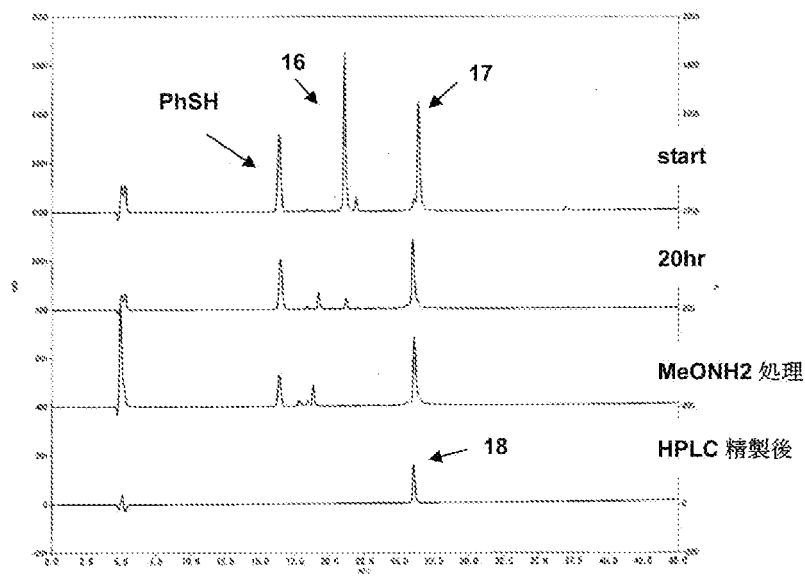


[図28]

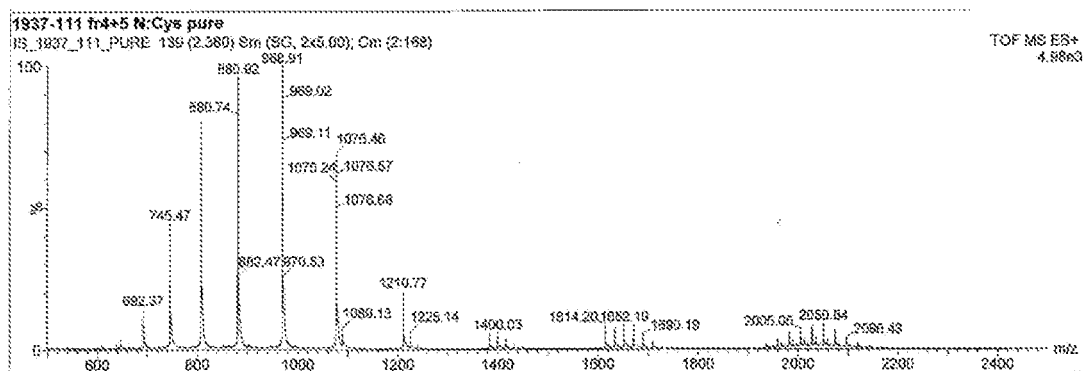


[図29]

A

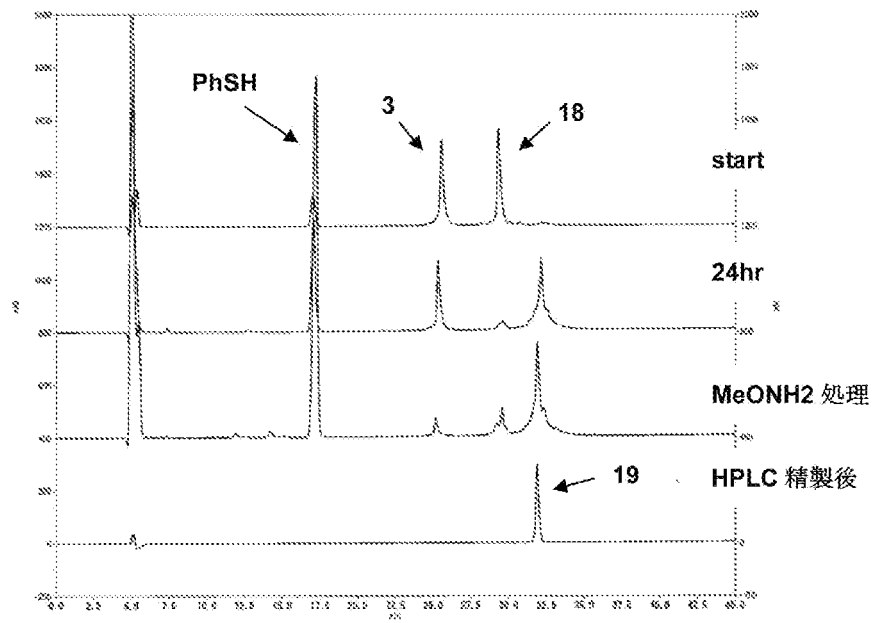


B

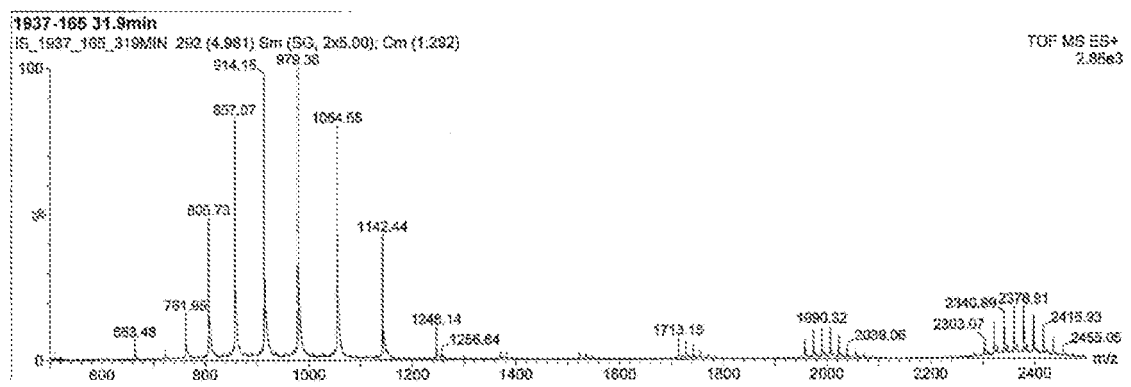


[図30]

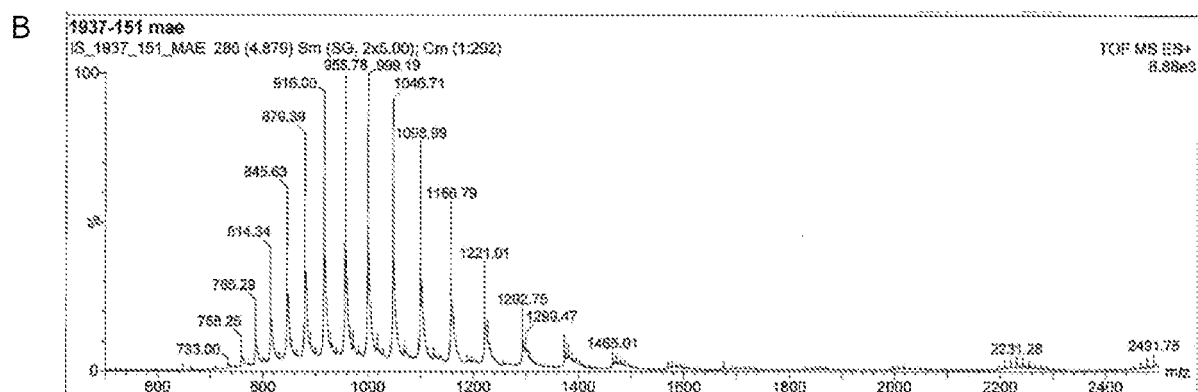
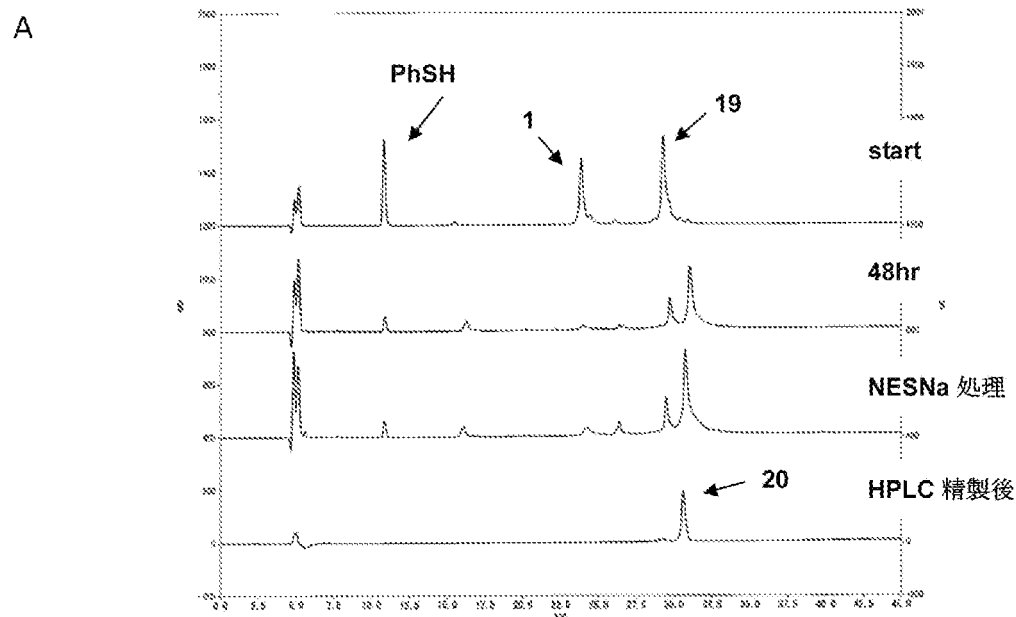
A



B

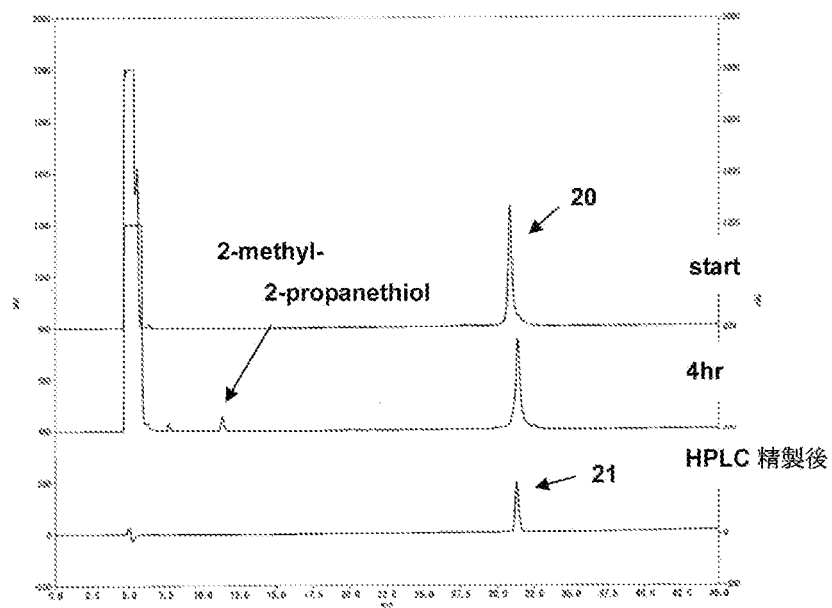


[図31]

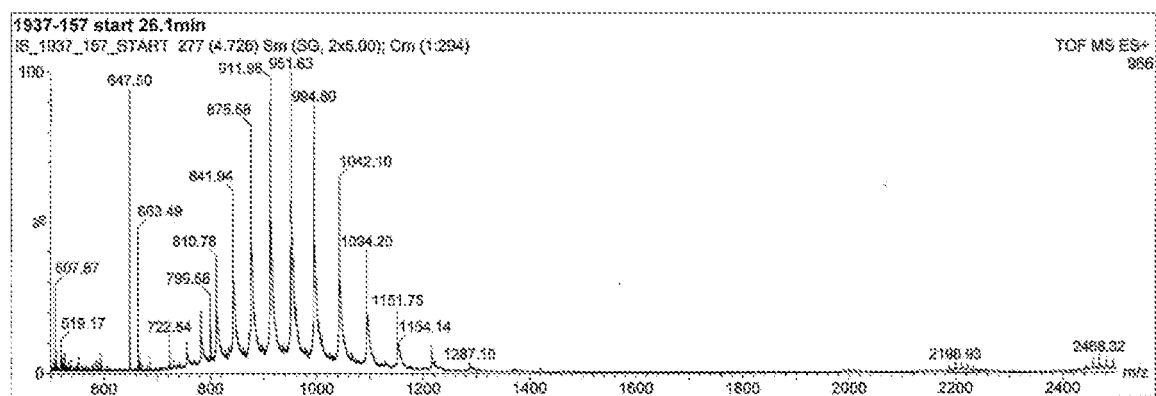


[図32]

A

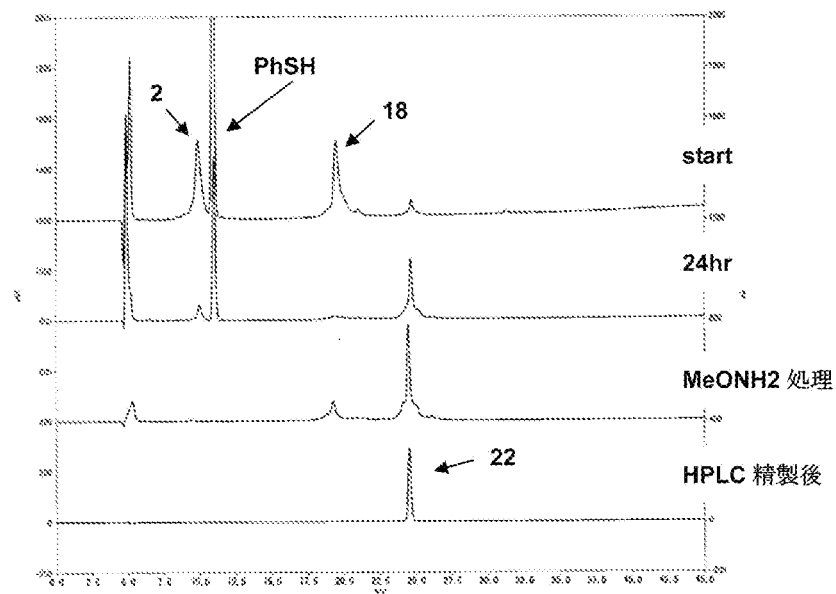


B

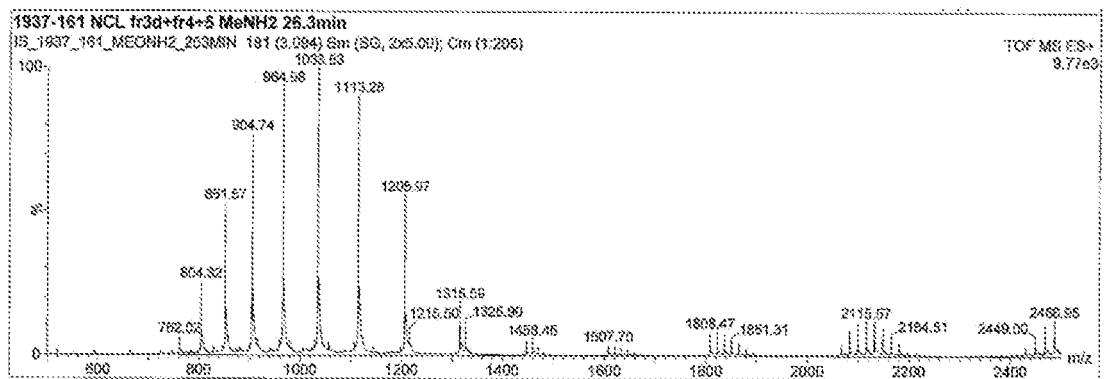


[図33]

A

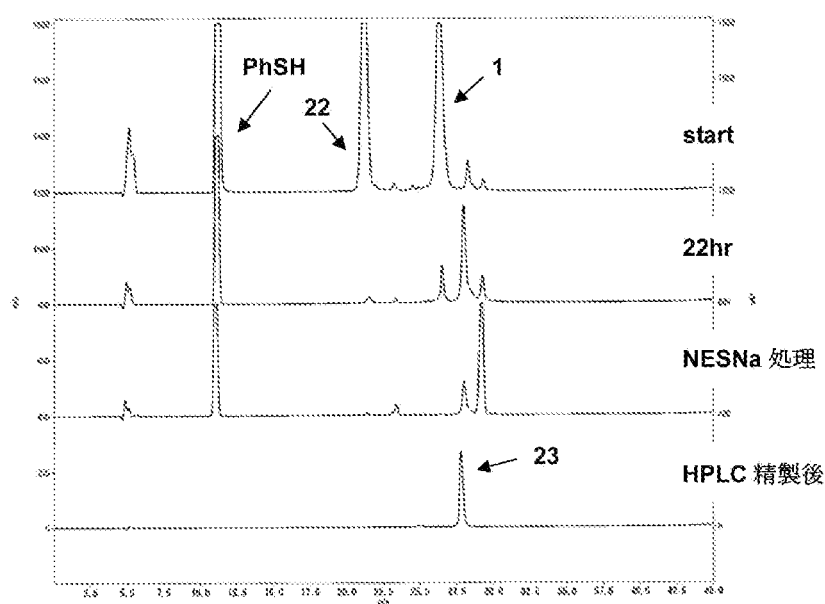


B

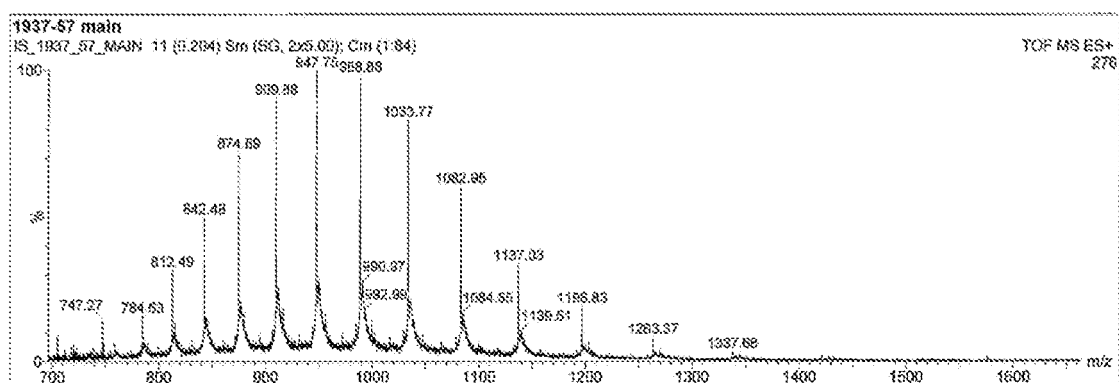


[図34]

A

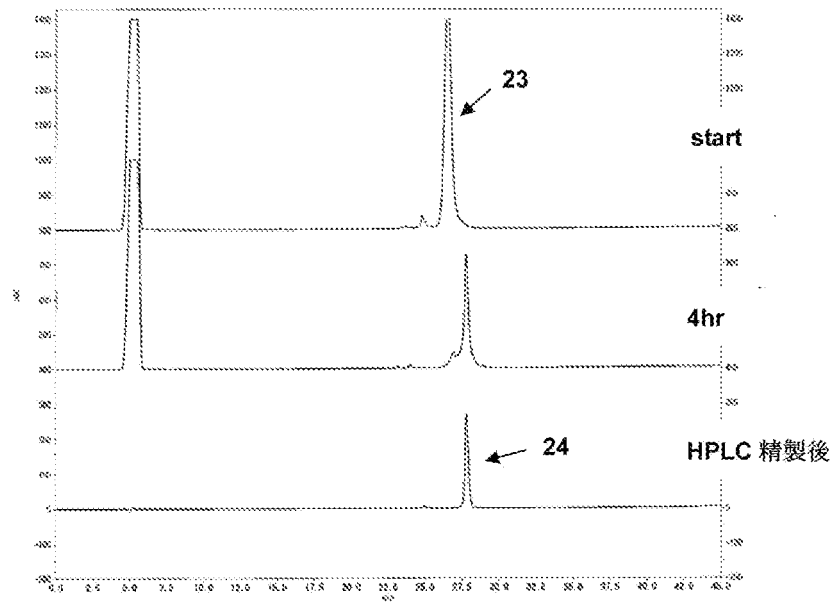


B

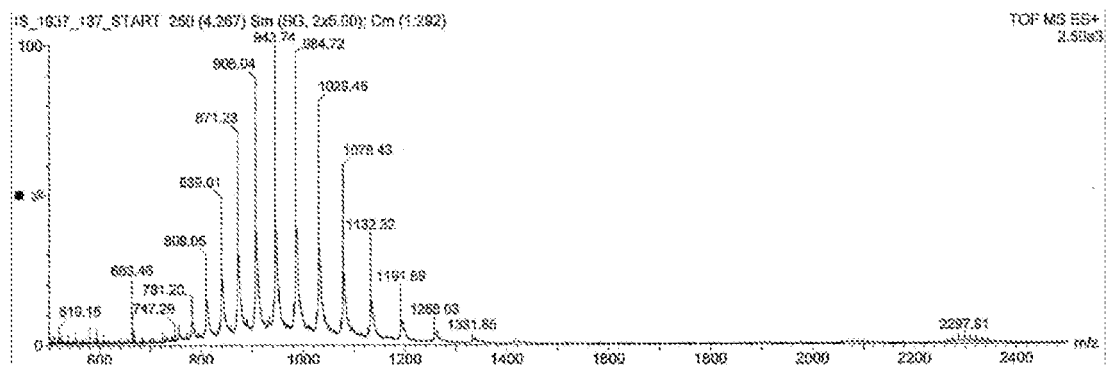


[図35]

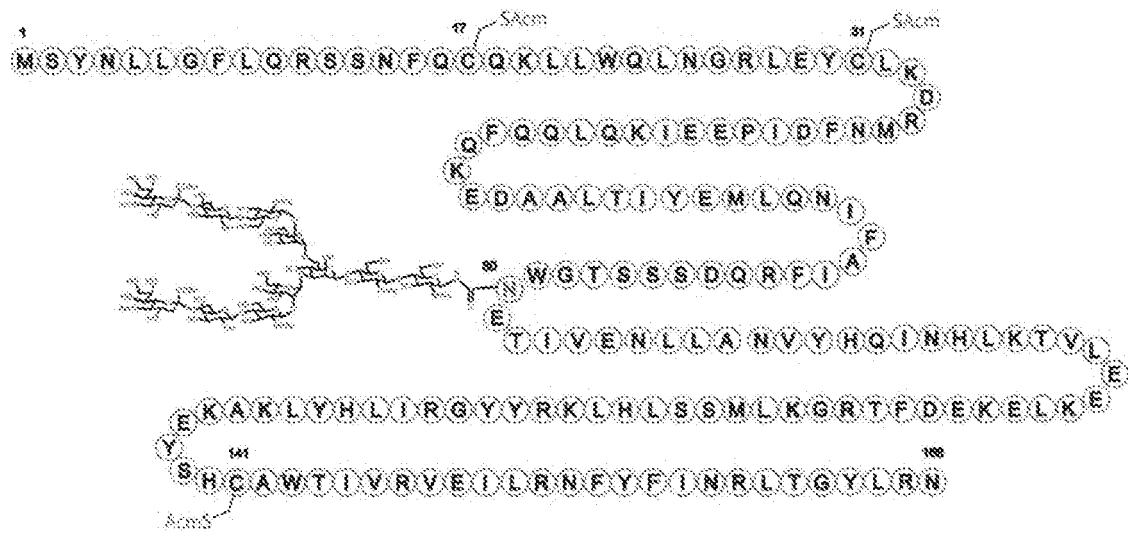
A



B

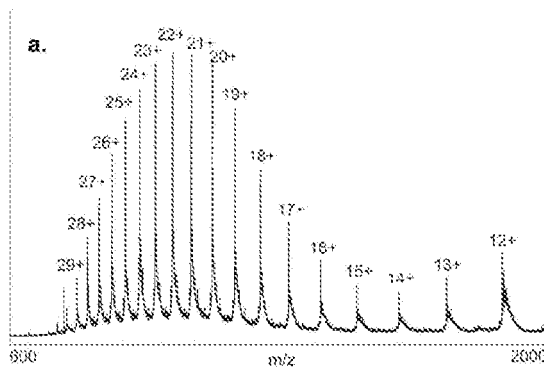


[図36]

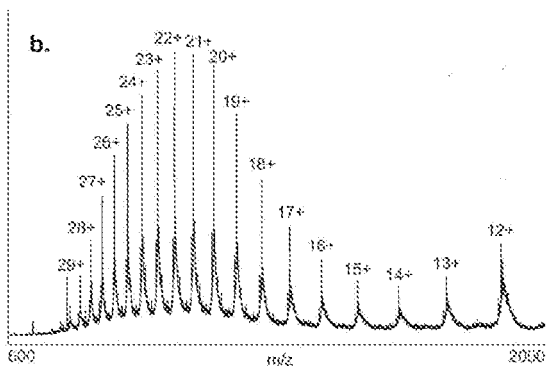


7

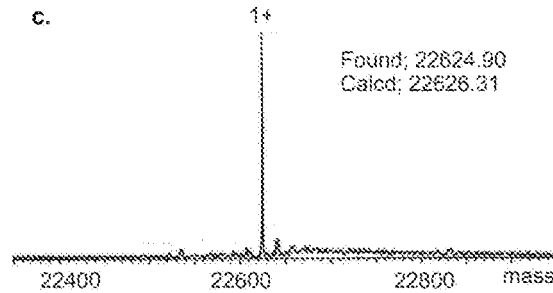
加熱処理前



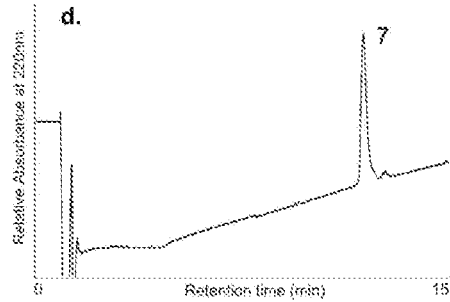
加熱処理後



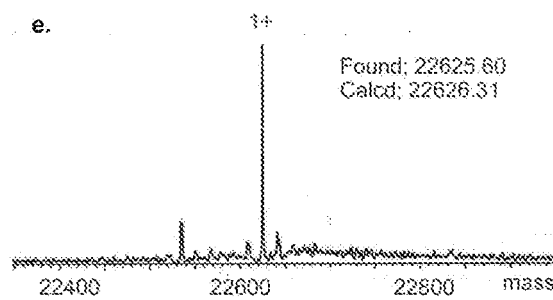
加熱処理前



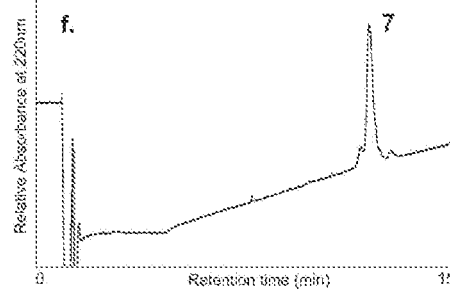
加熱処理前



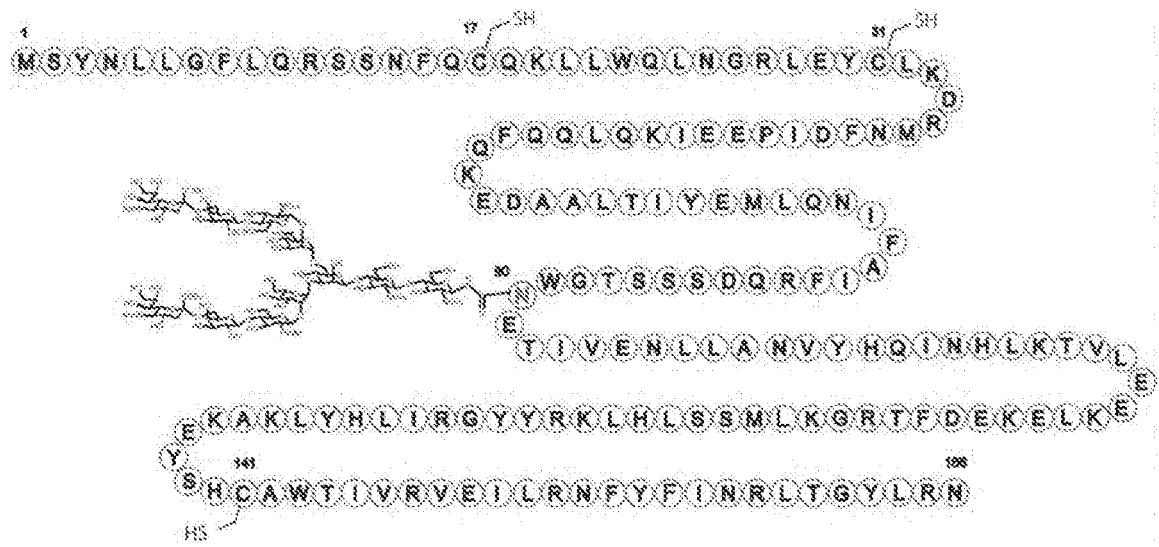
加熱処理後



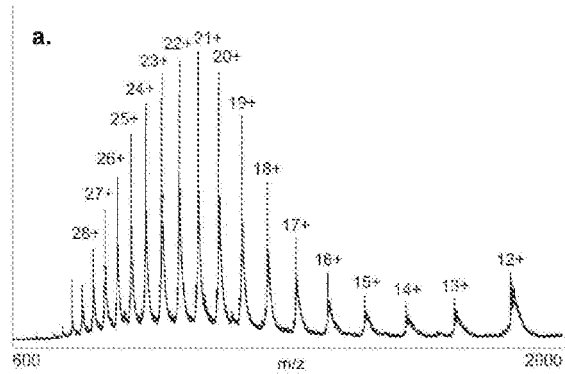
加熱処理後



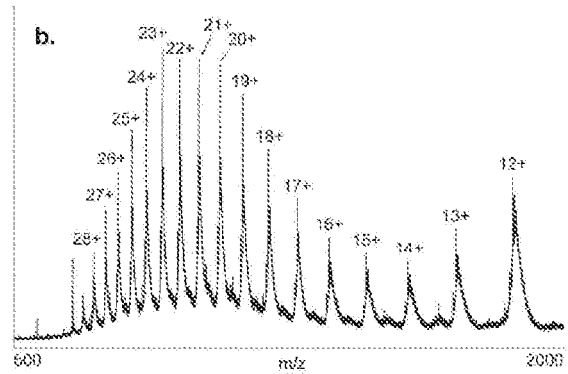
[図37]



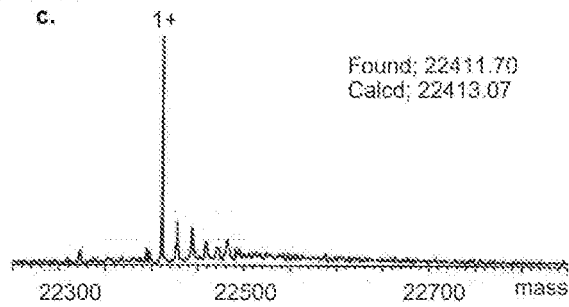
加熱処理前



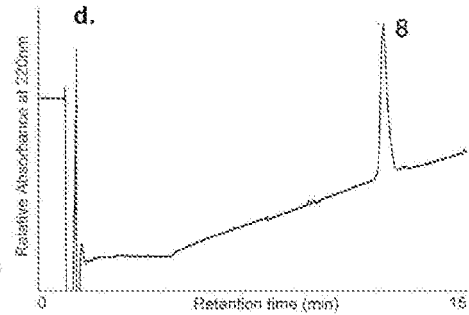
8 加熱処理後



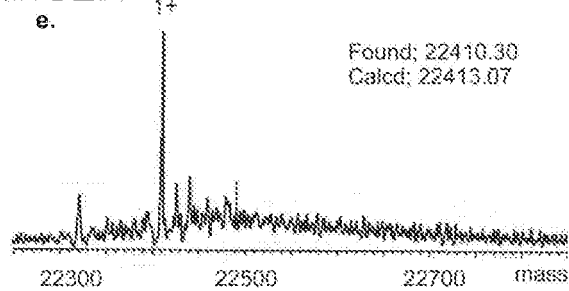
加熱処理前



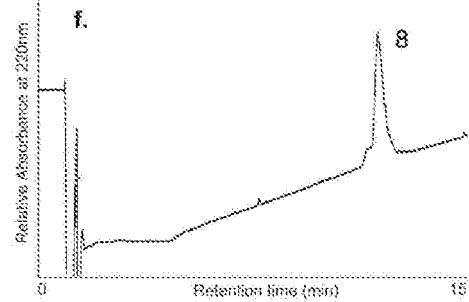
加熱処理前



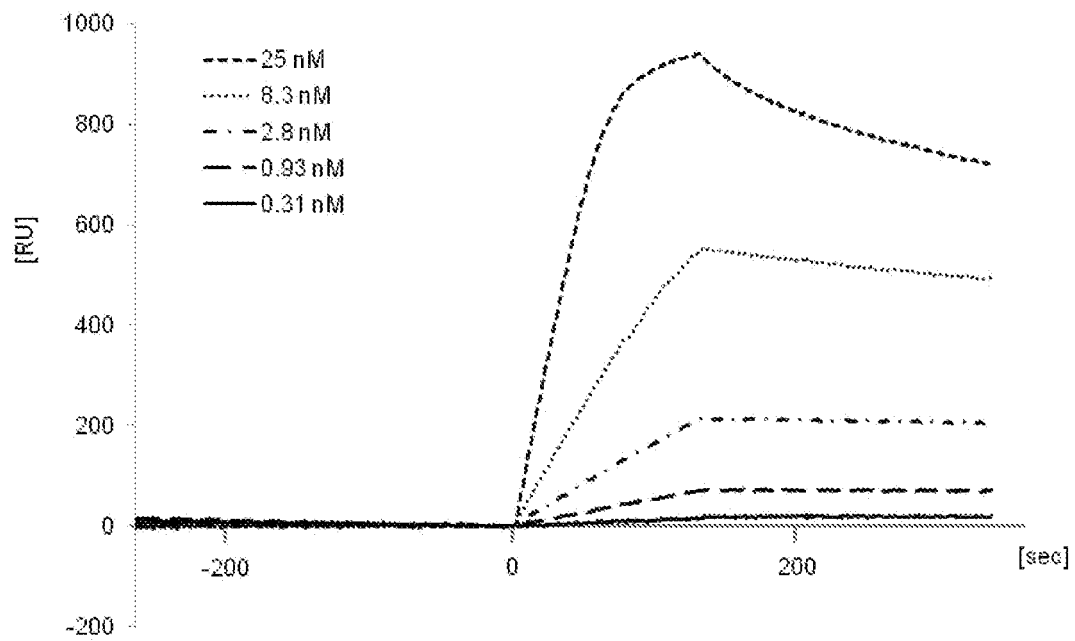
加熱処理後



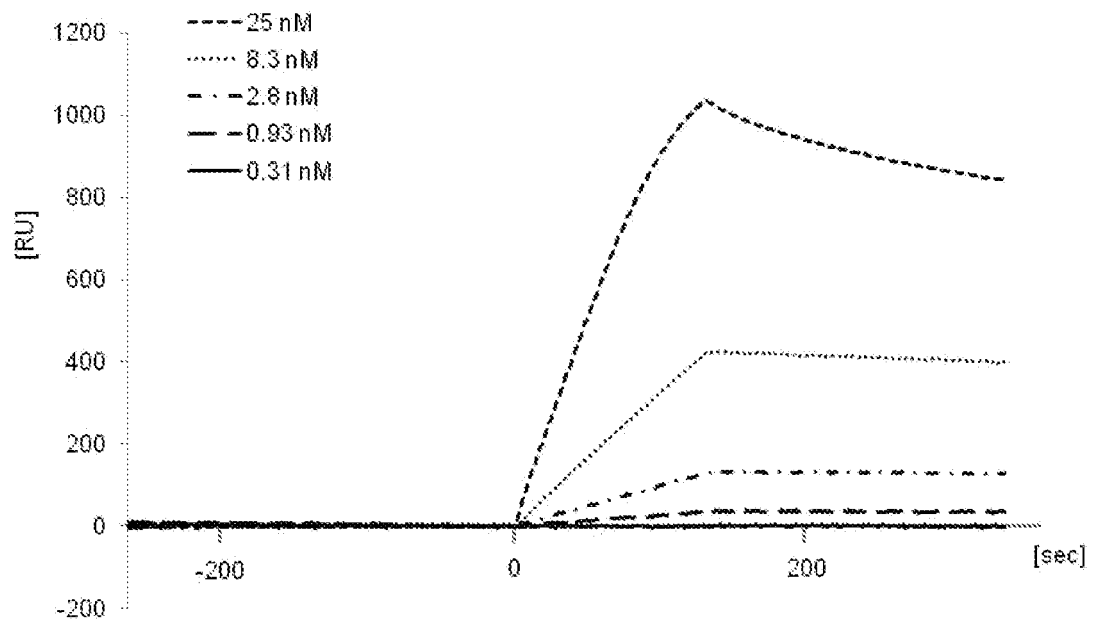
加熱処理後



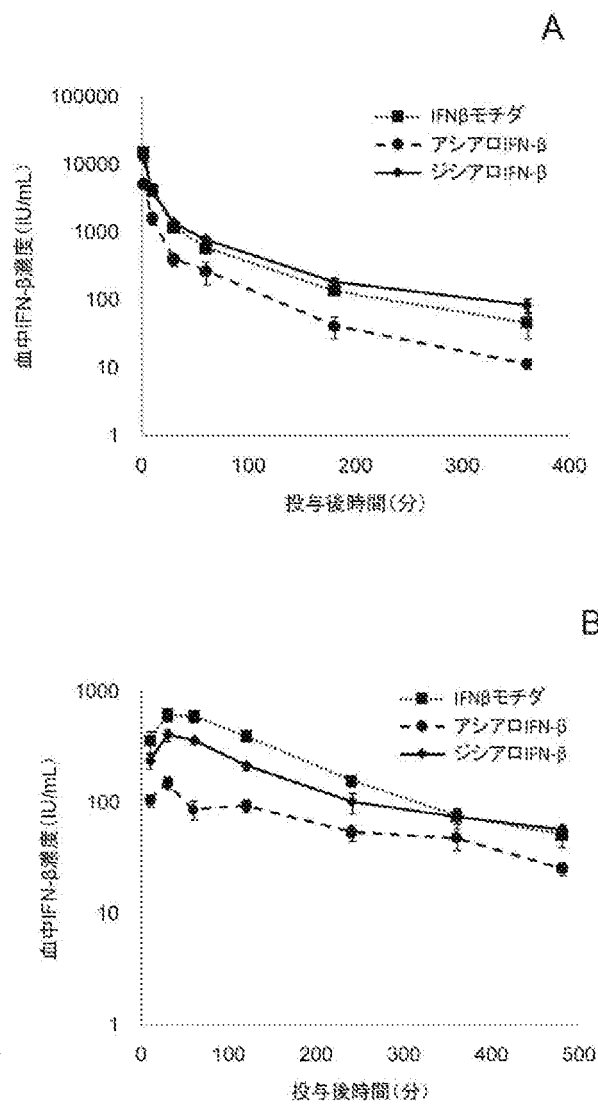
[図38]

非加熱処理の I F N - β の結合親和性

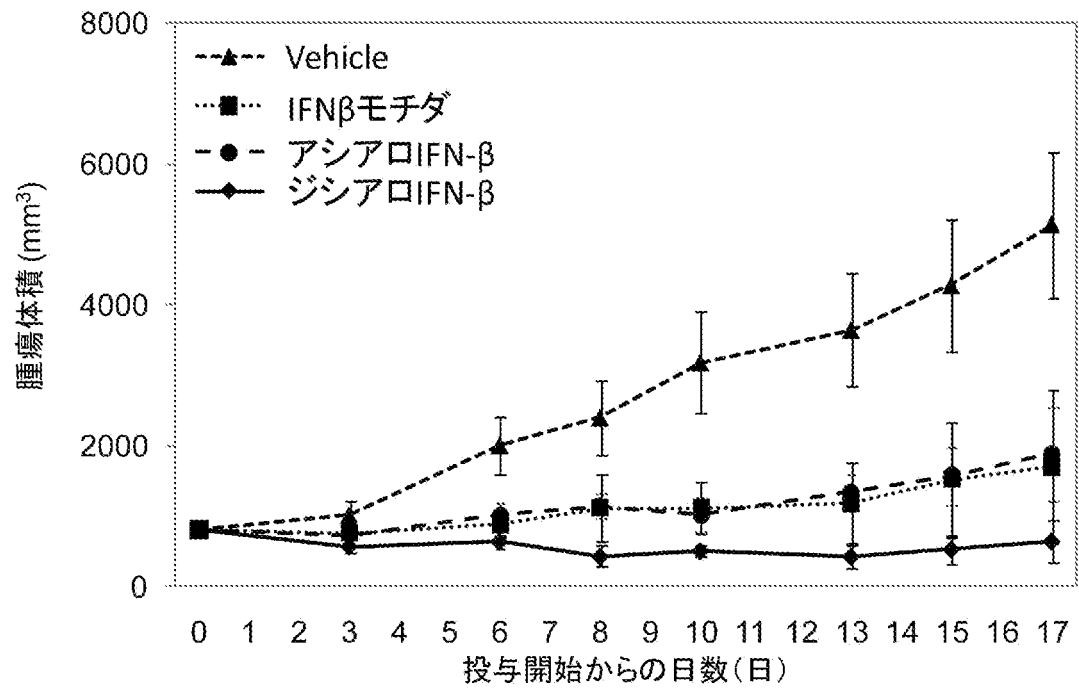
[図39]

加熱処理の I F N - β の結合親和性

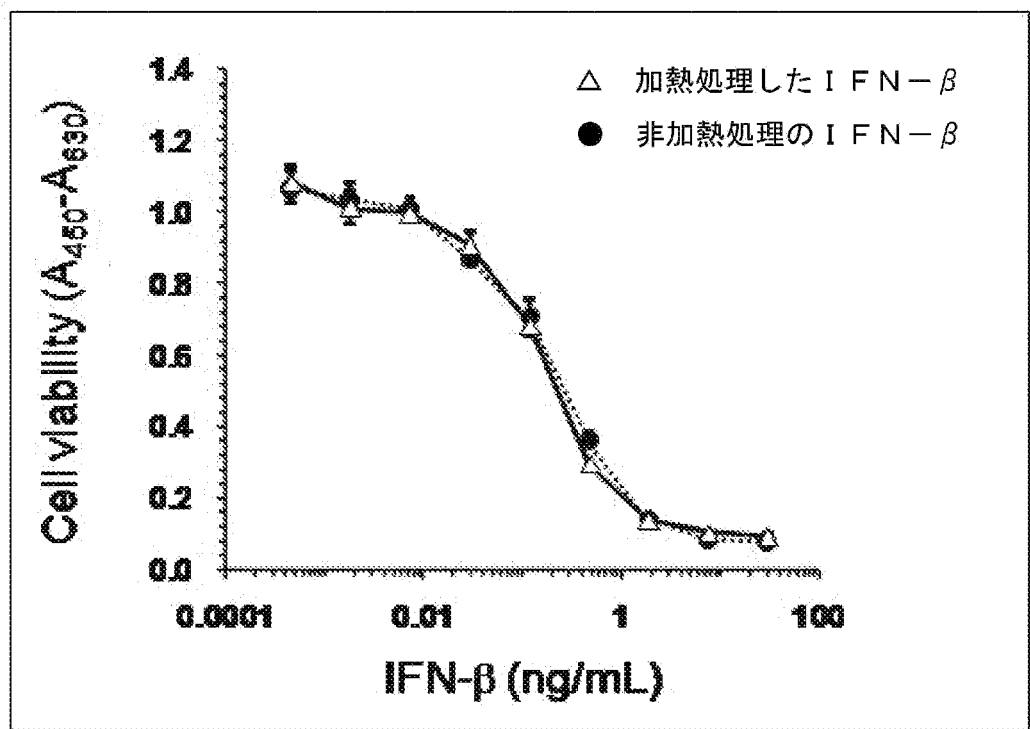
[図40]



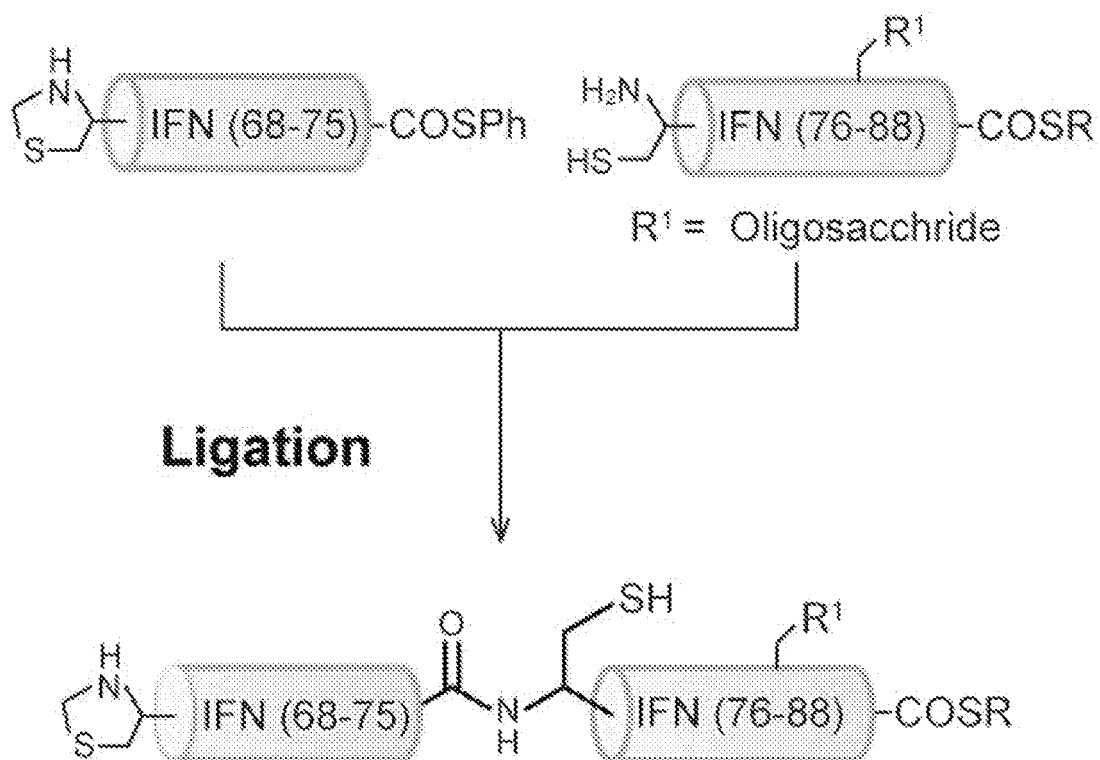
[図41]



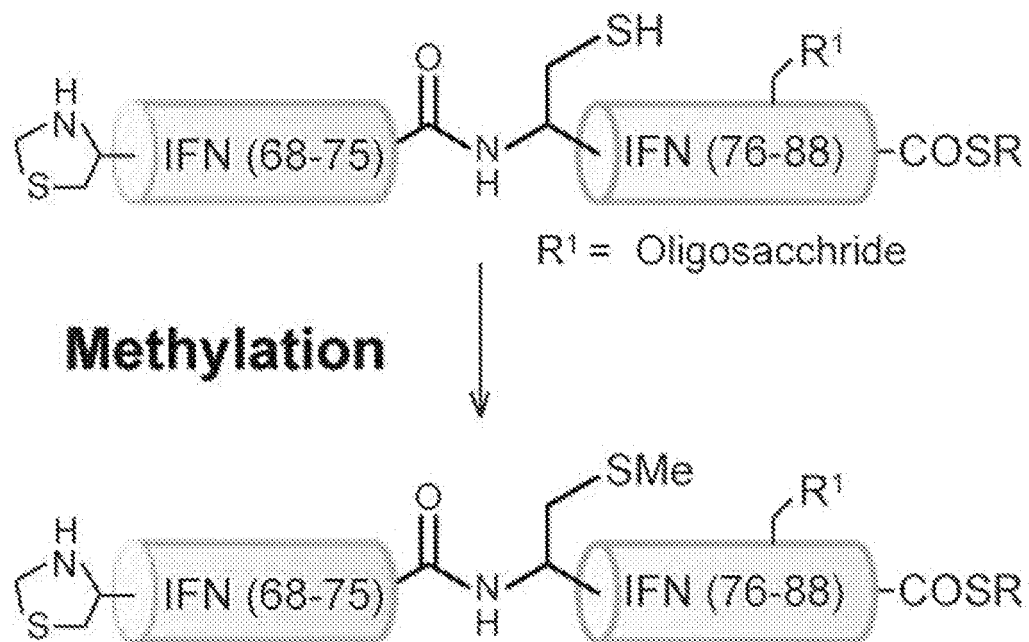
[図42]



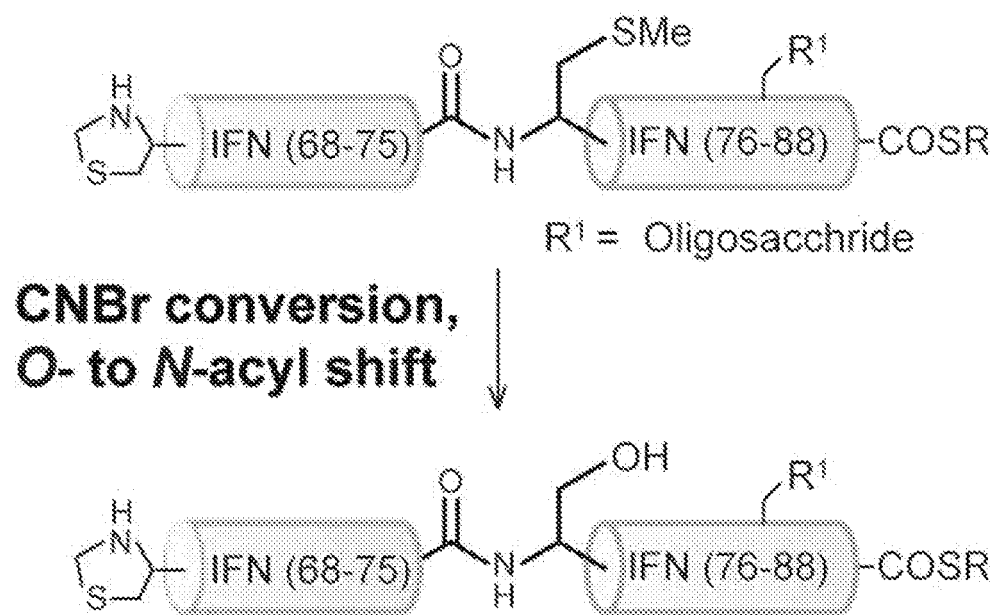
[図43]



[図44]

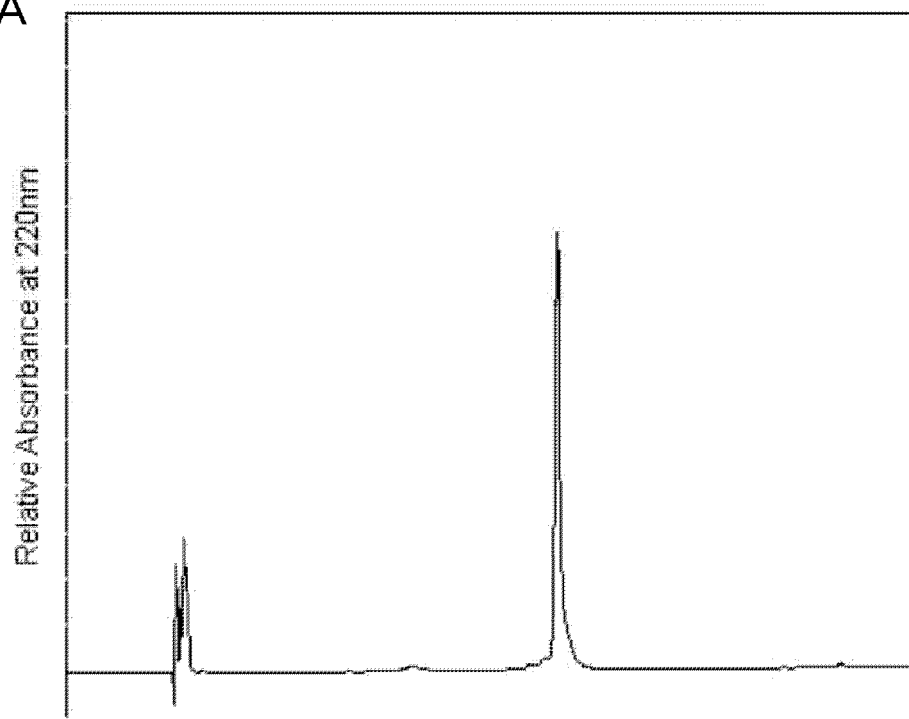


[図45]

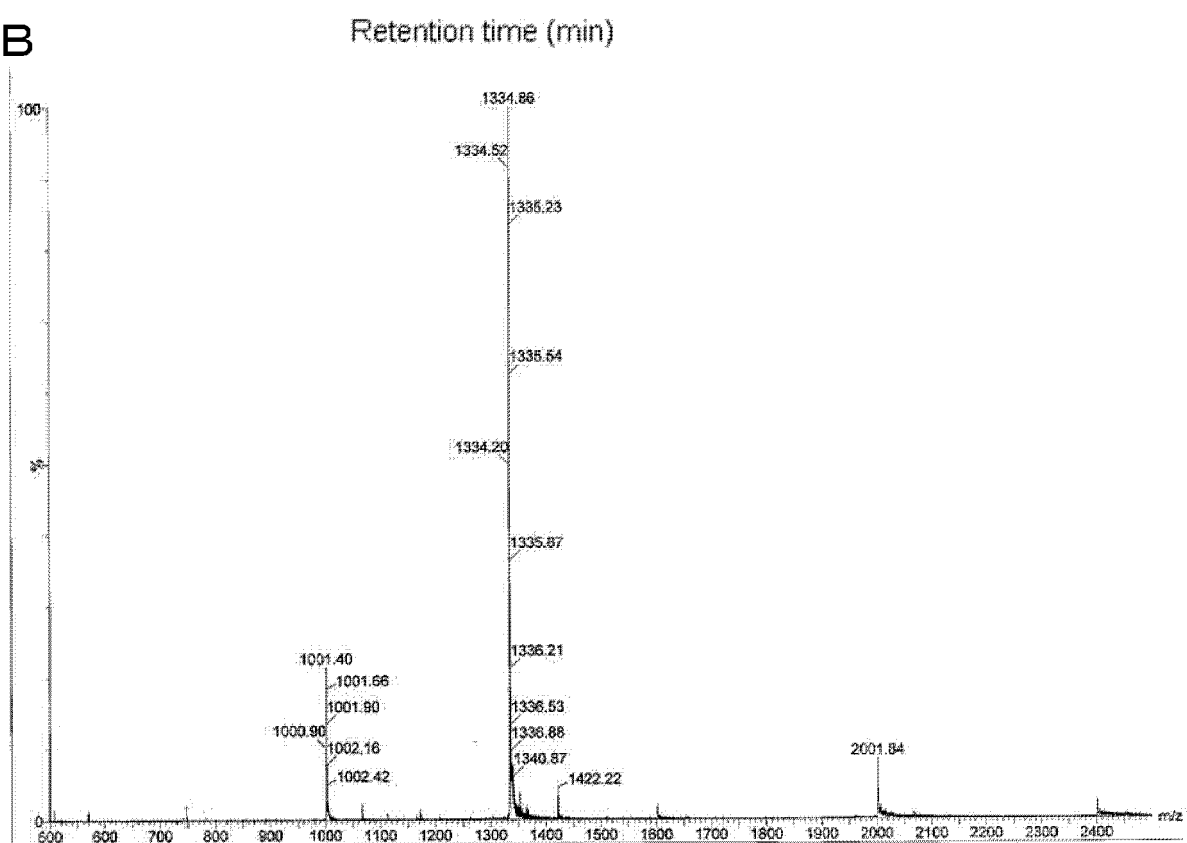


[図46]

A

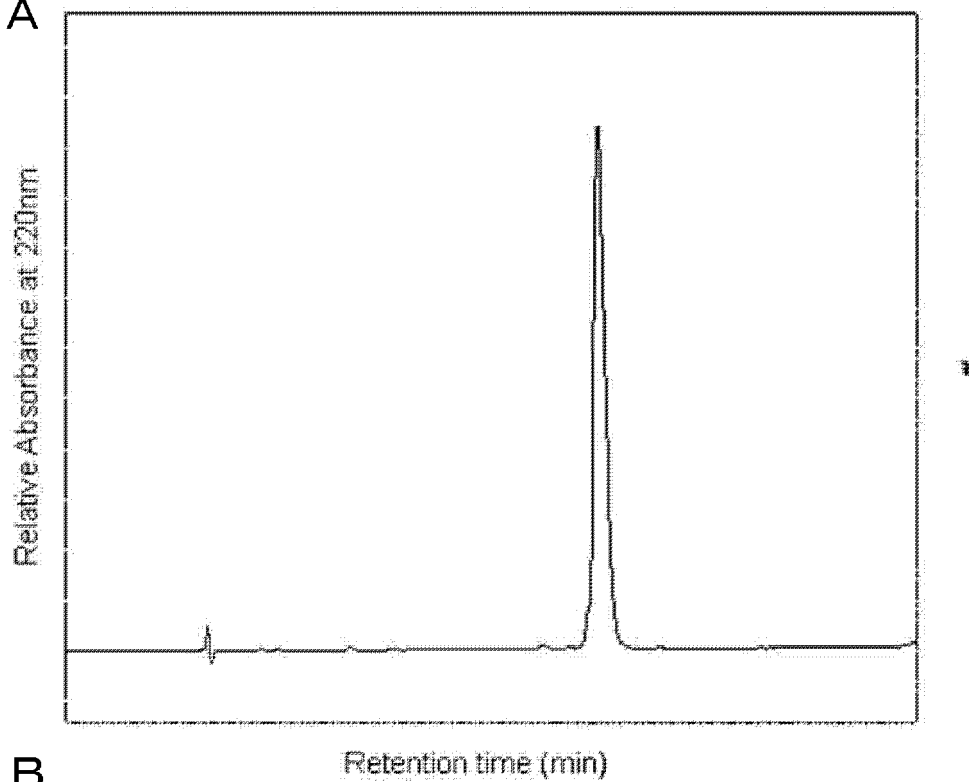


B

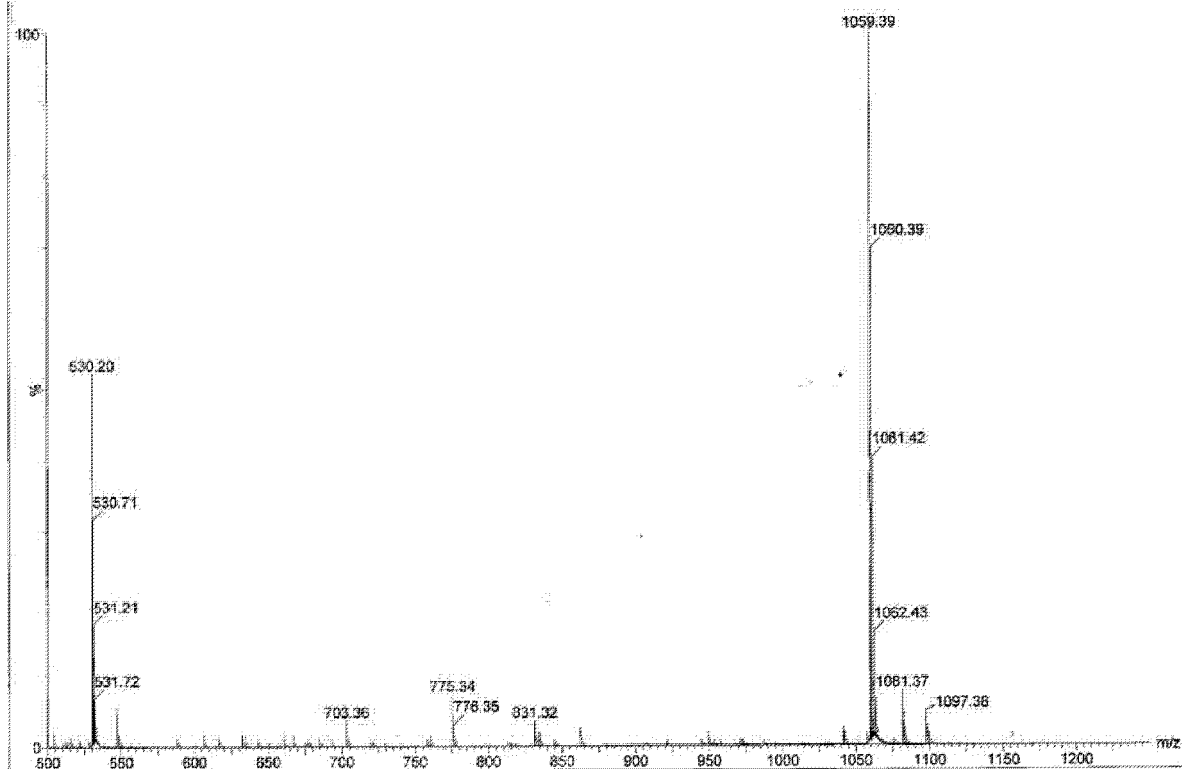


[図47]

A

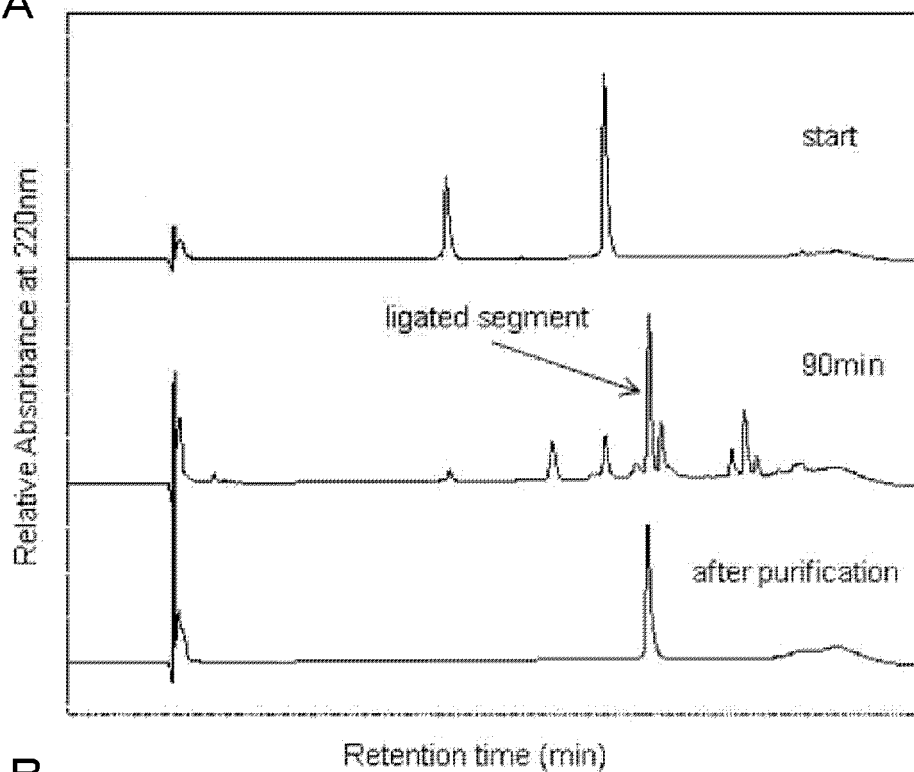


B

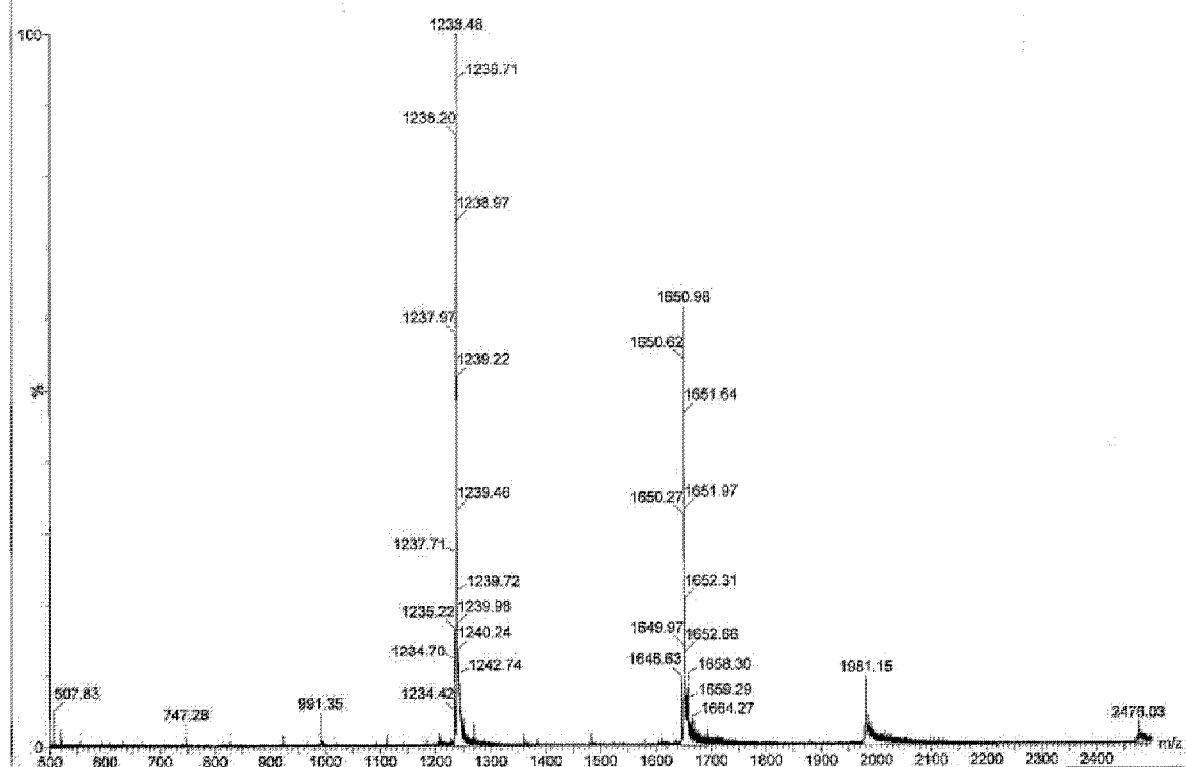


[図48]

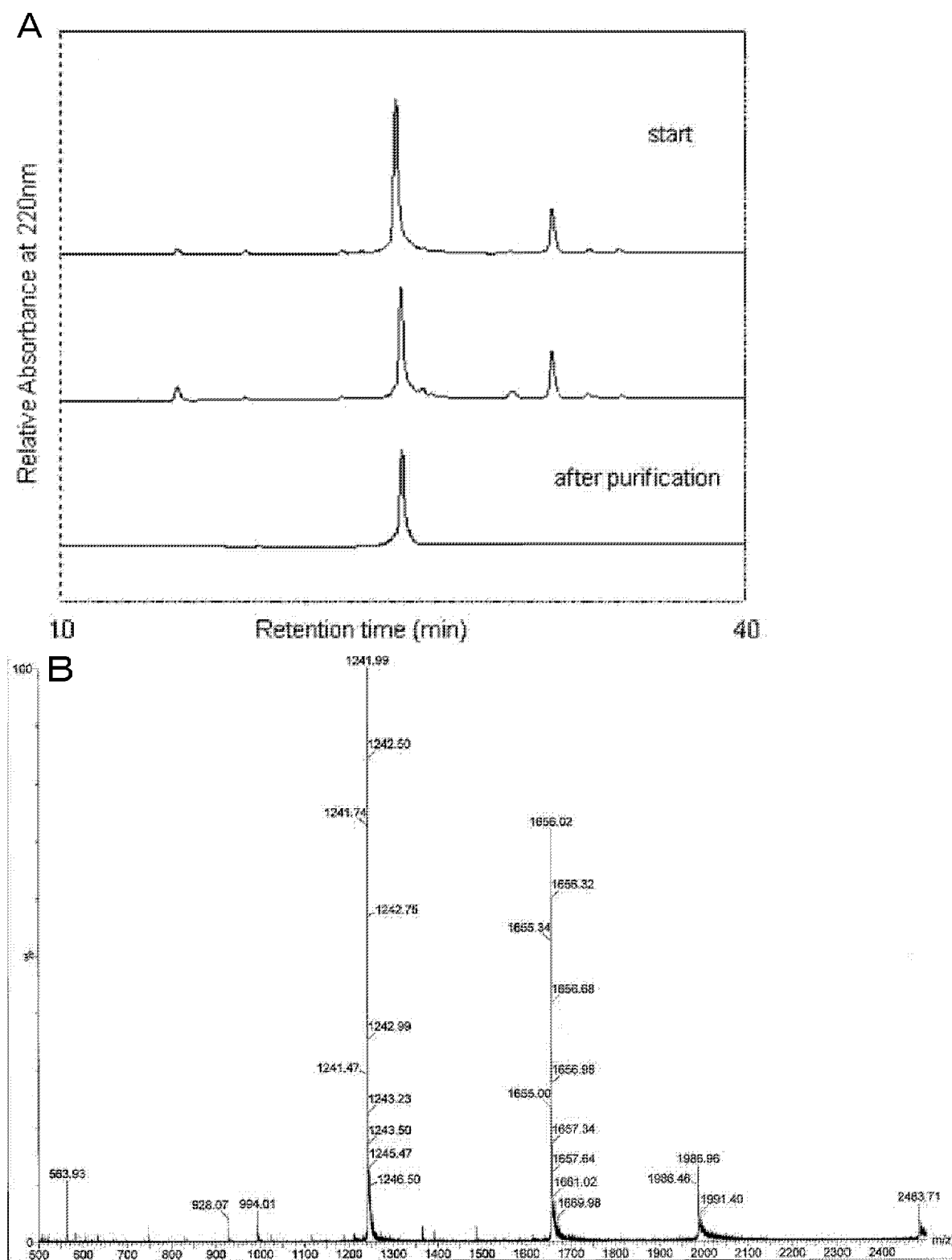
A



B

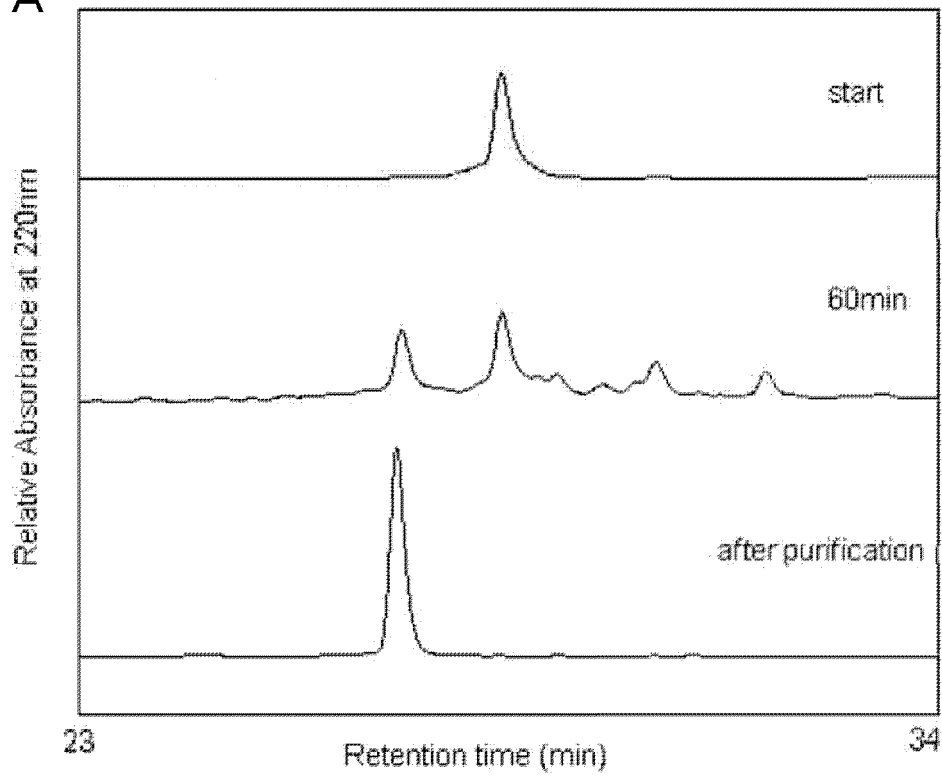


[図49]



[図50]

A



B

