Figure 1

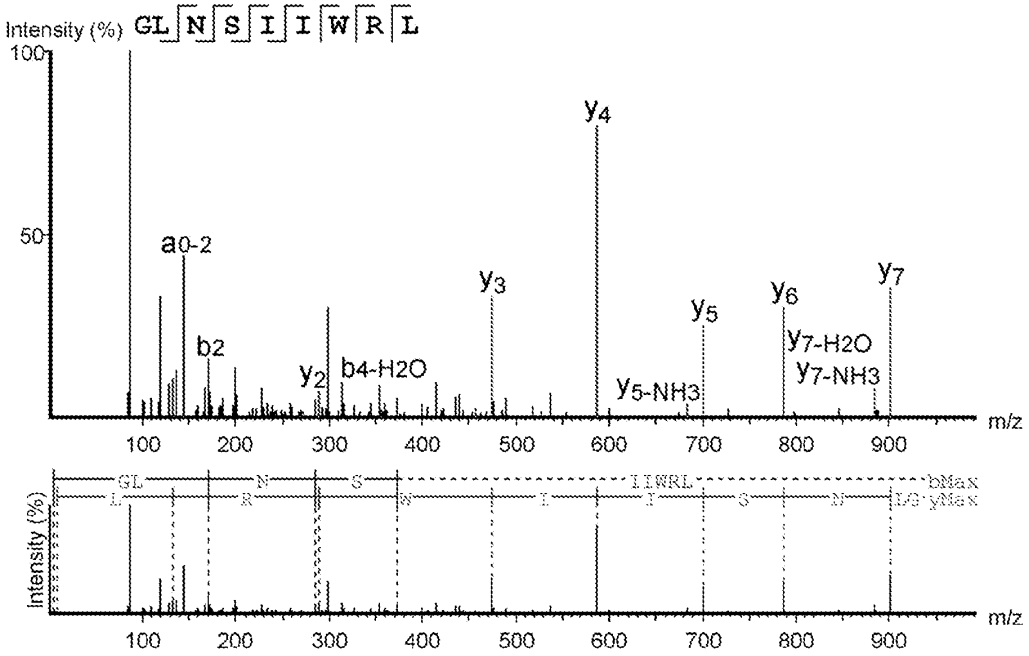

Intensity (%)
GLNSIIWRL
100
50
a0-2
b2
y2
b4-H2O
y3
y4
y5-NH3
y5
y6
y7-H2O
y7-NH3
y7
m/z
100
200
300
400
500
600
700
800
900
Intensity (%)
GL
N
S
IIWRL
bMax
L
R
W
I
I
S
N
L/I
yMax
m/z
100
200
300
400
500
600
700
800
900

Figure 2

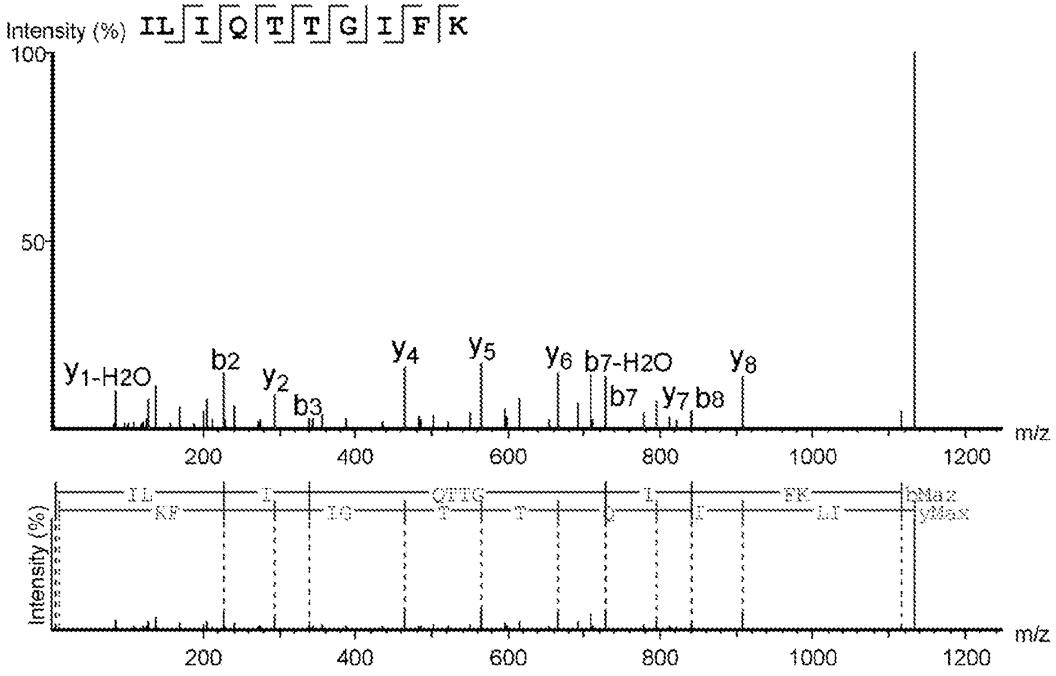

Intensity (%)
IL I Q T T G I F K
100
50
y1-H2O
b2
y2
b3
y4
y5
y6
b7-H2O
b7
y7
b8
y8
m/z
200
400
600
800
1000
1200
Intensity (%)
m/z
200
400
600
800
1000
1200

Figure 3

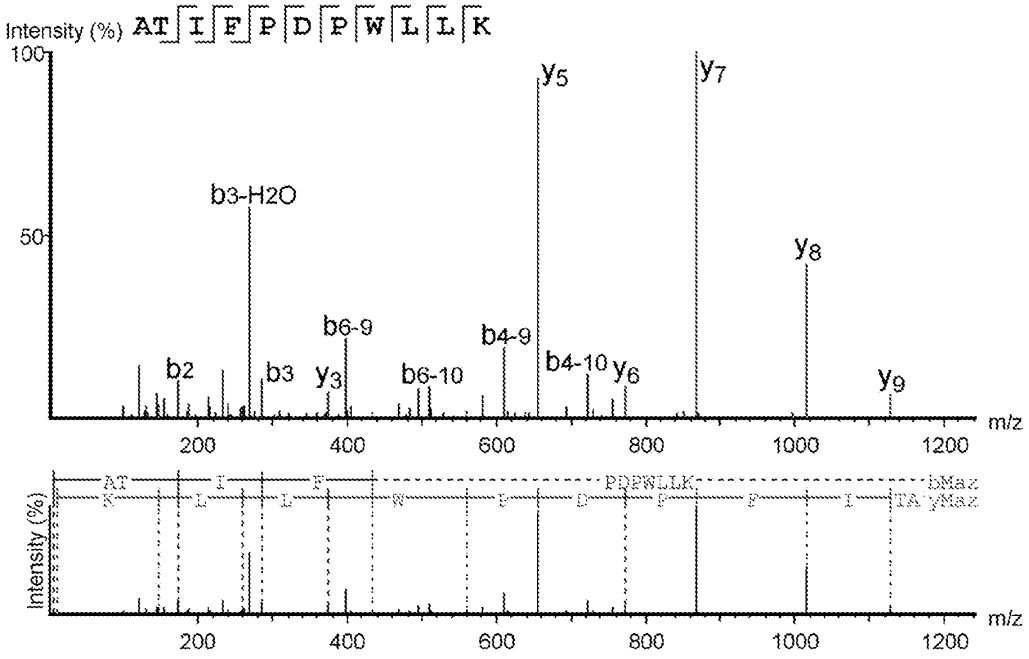
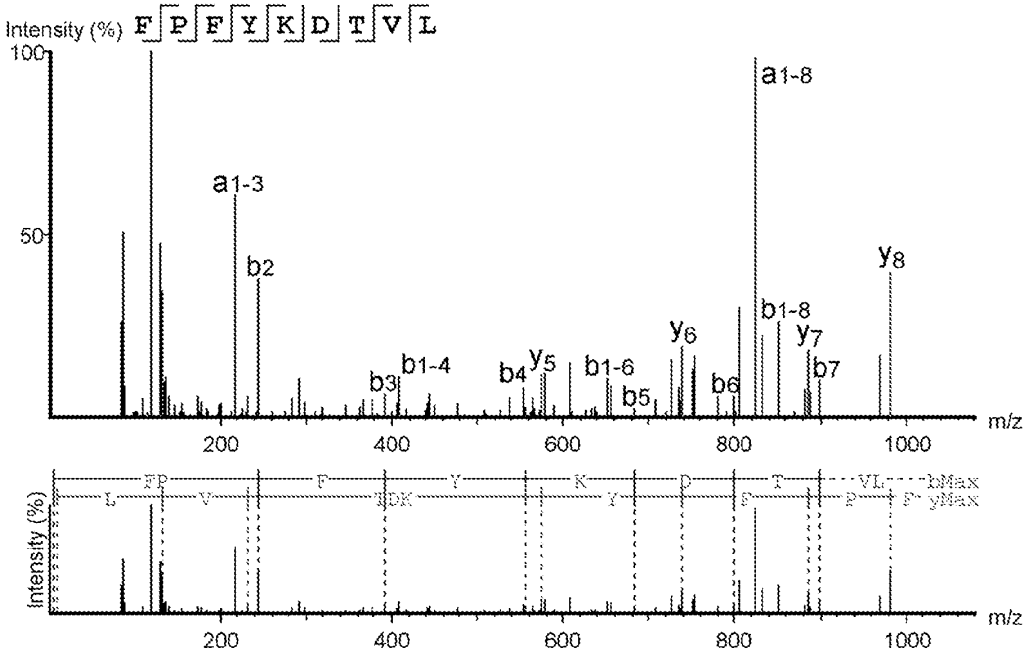

Intensity (%)
AT I F P D P W L L K
100
50
b3-H2O
y5
y7
y8
b6-9
b4-9
b2
b3
y3
b6-10
b4-10
y6
y9
m/z
200
400
600
800
1000
1200
AT I F PDPWLLK bMaz
K L L W P D P F I TA yMaz
Intensity (%)
m/z
200
400
600
800
1000
1200

Figure 4


Intensity (%)
F P F Y K D T V L
100
50
a1-8
a1-3
b2
y8
b1-8
y6
y7
b1-4
y5
b1-6
b7
b3
b4
b5
b6
m/z
200
400
600
800
1000
FP
P
Y
K
D
T
VL
bMax
L
V
PK
Y
P
P
yMax
Intensity (%)
m/z
200
400
600
800
1000

5/40

Figure 5

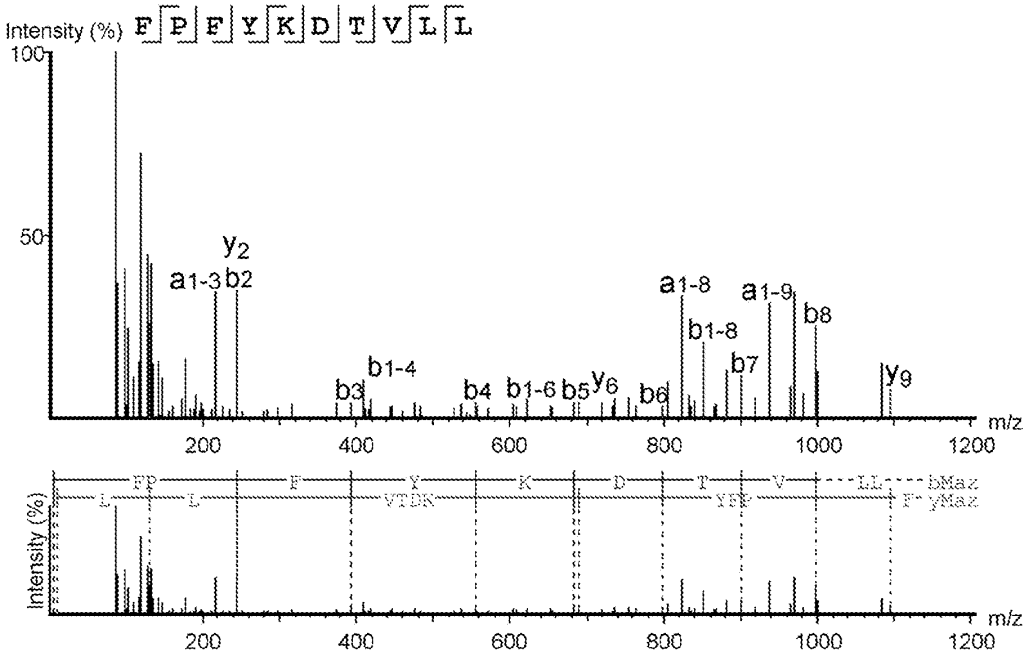

Intensity (%)
F P F Y K D T V L L
100
50
y2
a1-3 b2
b3
b1-4
b4
b1-6
b5
y6
b6
a1-8
b1-8
b7
a1-9
b8
y9
m/z
200
400
600
800
1000
1200
FP
F
Y
K
D
T
V
LL
bMaz
L
L
VTDK
YFP
F yMaz
Intensity (%)
m/z
200
400
600
800
1000
1200

Figure 6

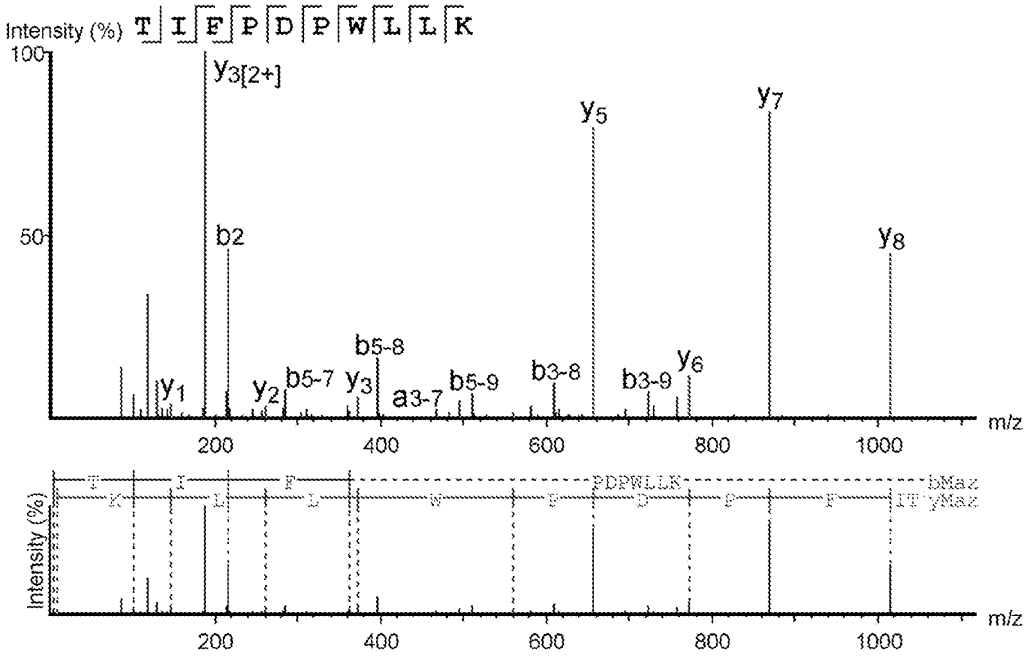

Intensity (%)
T I F P D P W L L K
100
50
y3[2+]
y5
y7
b2
y8
b5-8
y1
y2
b5-7
y3
a3-7
b5-9
b3-8
b3-9
y6
m/z
200
400
600
800
1000
TIFPDPWLLK
bMaz
KLLWPDPFIIYMaz
Intensity (%)
m/z
200
400
600
800
1000

Figure 7

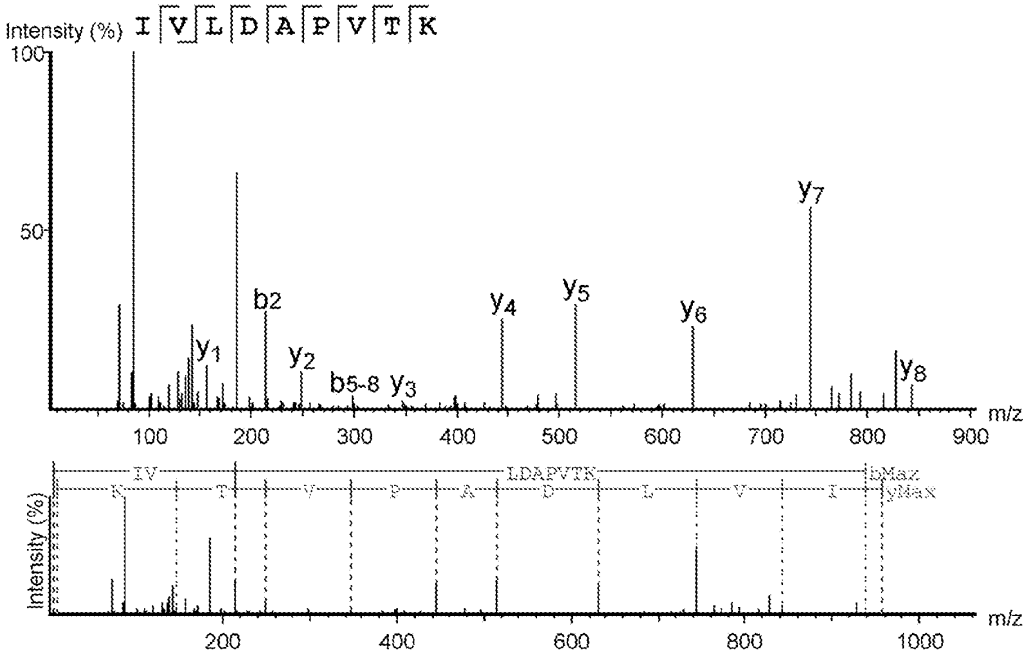

Intensity (%)
I V L D A P V T K
100
50
b2
y1
y2
b5-8
y3
y4
y5
y6
y7
y8
m/z
100
200
300
400
500
600
700
800
900
IV
LDAPVTK
bMax
K
T
V
P
A
D
L
V
I
yMax
Intensity (%)
m/z
200
400
600
800
1000

Figure 8

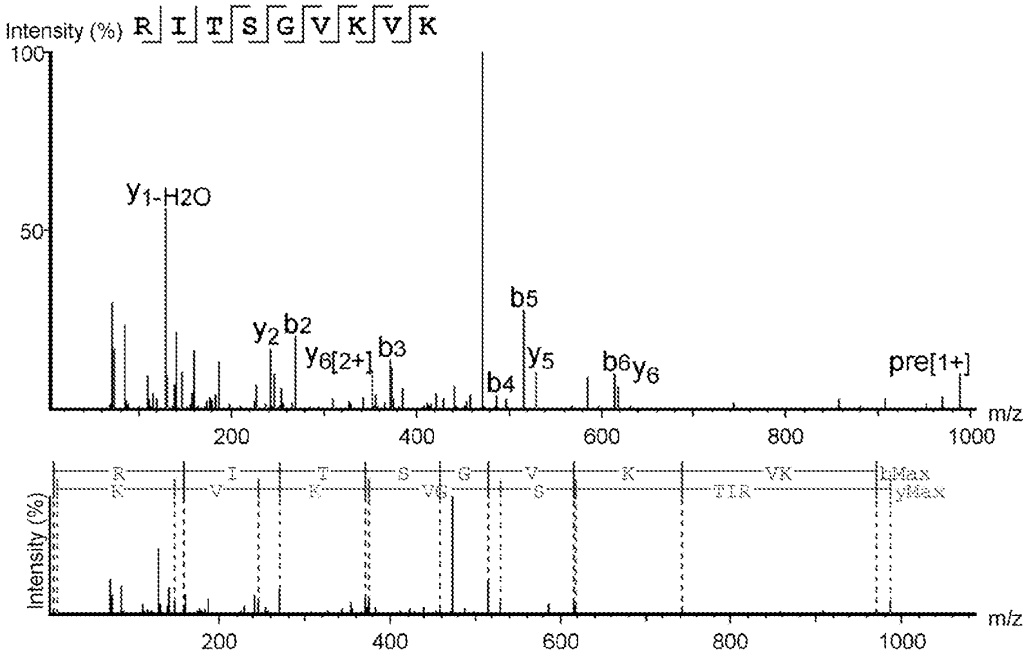

Intensity (%)
R I T S G V K V K
100
50
y1-H2O
y2
b2
y6[2+]
b3
b4
b5
y5
b6
y6
pre[1+]
m/z
200
400
600
800
1000
Intensity (%)
bMax
yMax
TIR
m/z
200
400
600
800
1000

Figure 9

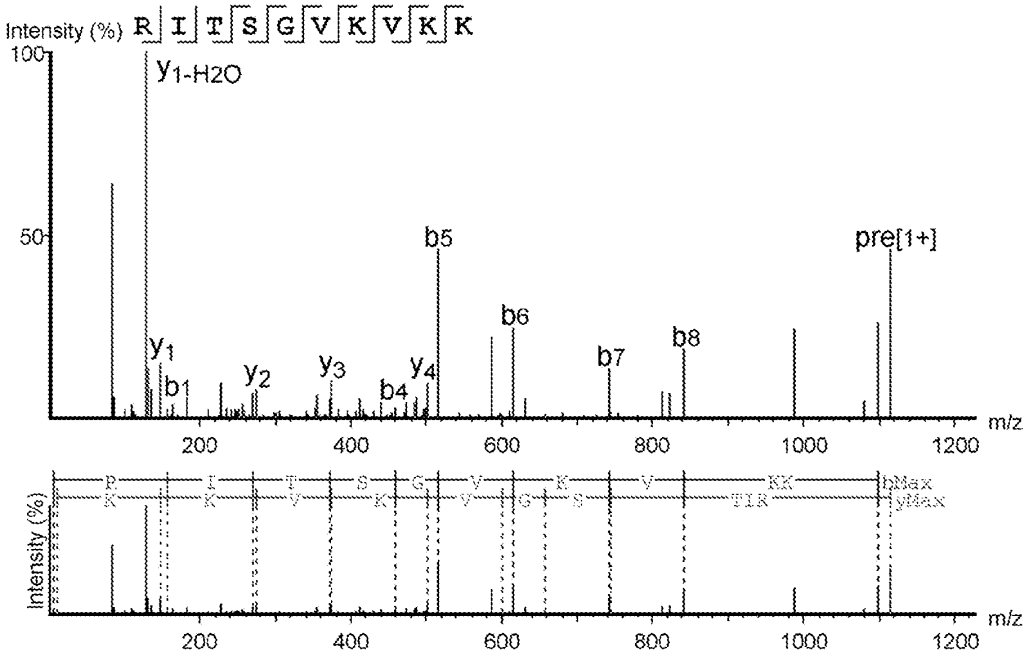

Intensity (%)
R I T S G V K V K K
100
50
y1-H2O
b5
pre[1+]
b6
b8
b7
y1
b1
y2
y3
y4
b4
m/z
200
400
600
800
1000
1200
bMax
yMax
TIR
Intensity (%)
m/z
200
400
600
800
1000
1200

Figure 10

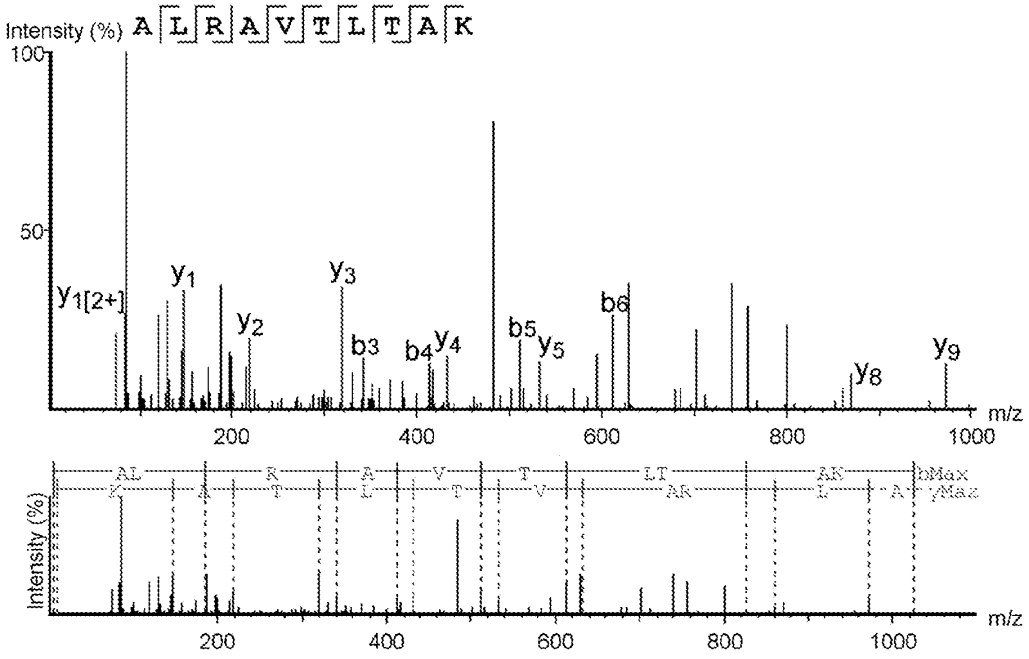

Intensity (%)
A L R A V T L T A K
100
50
y1[2+]
y1
y2
y3
b3
b4
y4
b5
y5
b6
y8
y9
m/z
200
400
600
800
1000
AL
R
A
V
T
LT
AK
bMax
yMax
Intensity (%)
m/z
200
400
600
800
1000

Figure 11

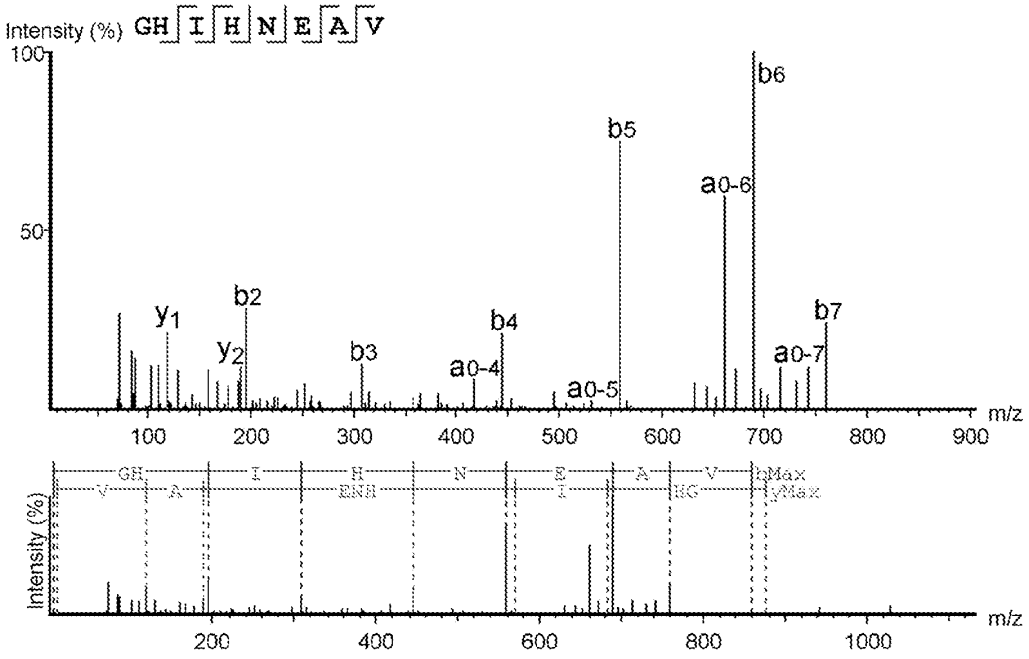

Intensity (%)
GHIHNEAV
100
50
b6
b5
a0-6
y1
b2
y2
b3
b4
a0-4
a0-5
b7
a0-7
m/z
100
200
300
400
500
600
700
800
900
bMax
yMax
Intensity (%)
m/z
200
400
600
800
1000

Figure 12

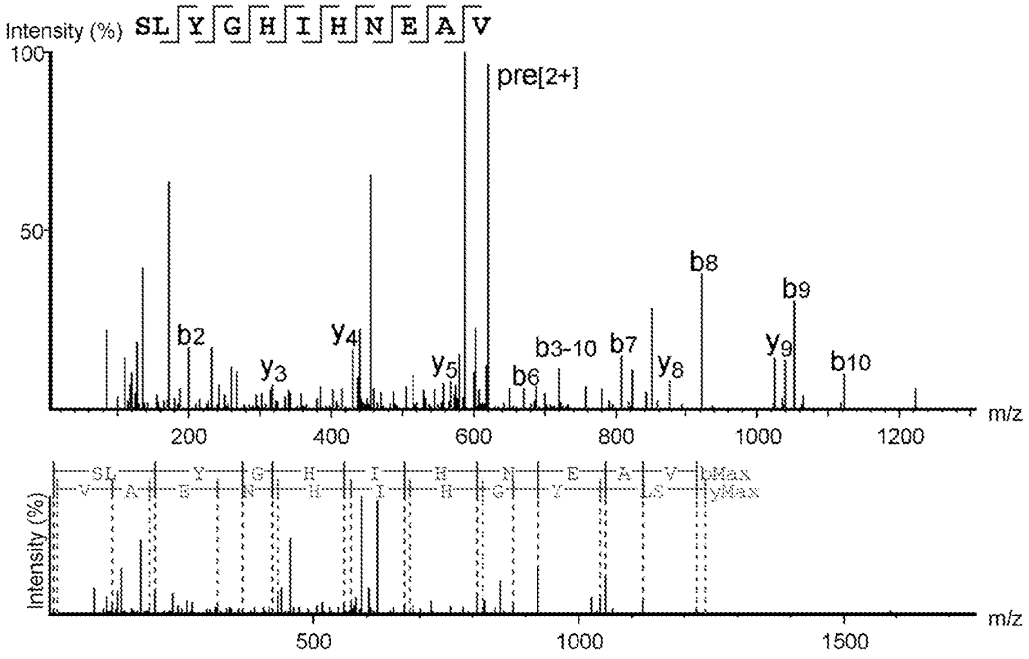

Intensity (%)
SLYGHIHNEAV
100
50
pre[2+]
b2
y3
y4
y5
b6
b3-10
b7
y8
b8
b9
y9
b10
m/z
200
400
600
800
1000
1200
Intensity (%)
m/z
500
1000
1500

Figure 13

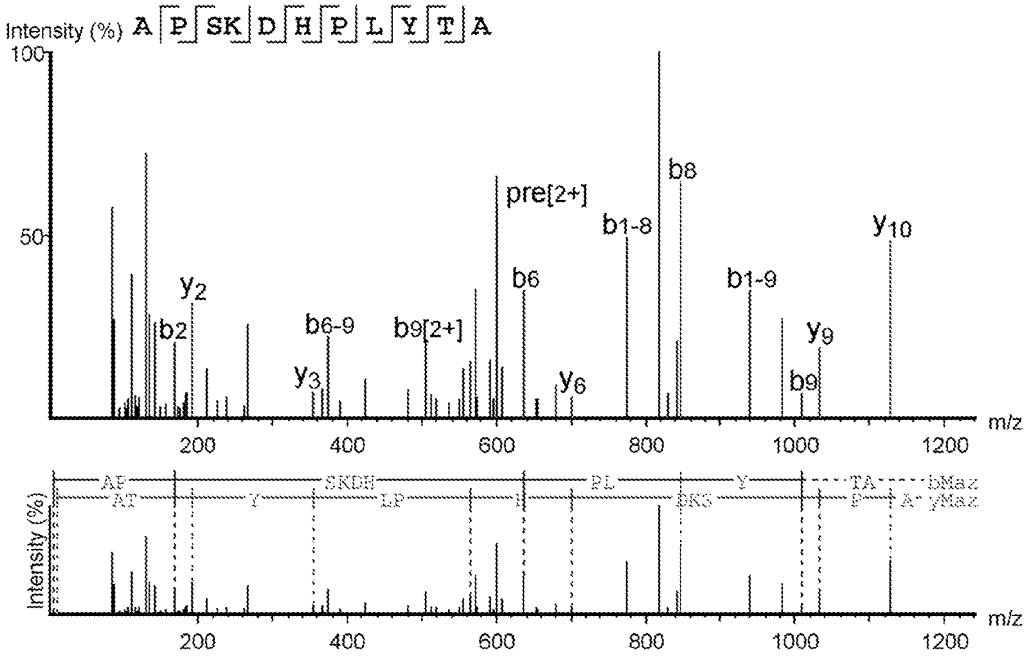
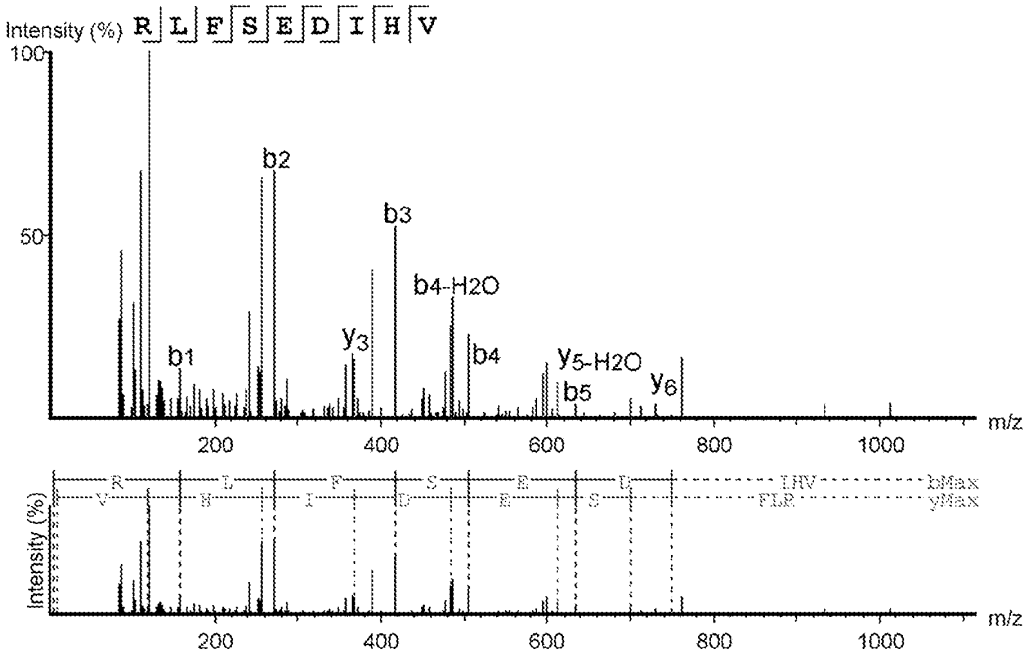
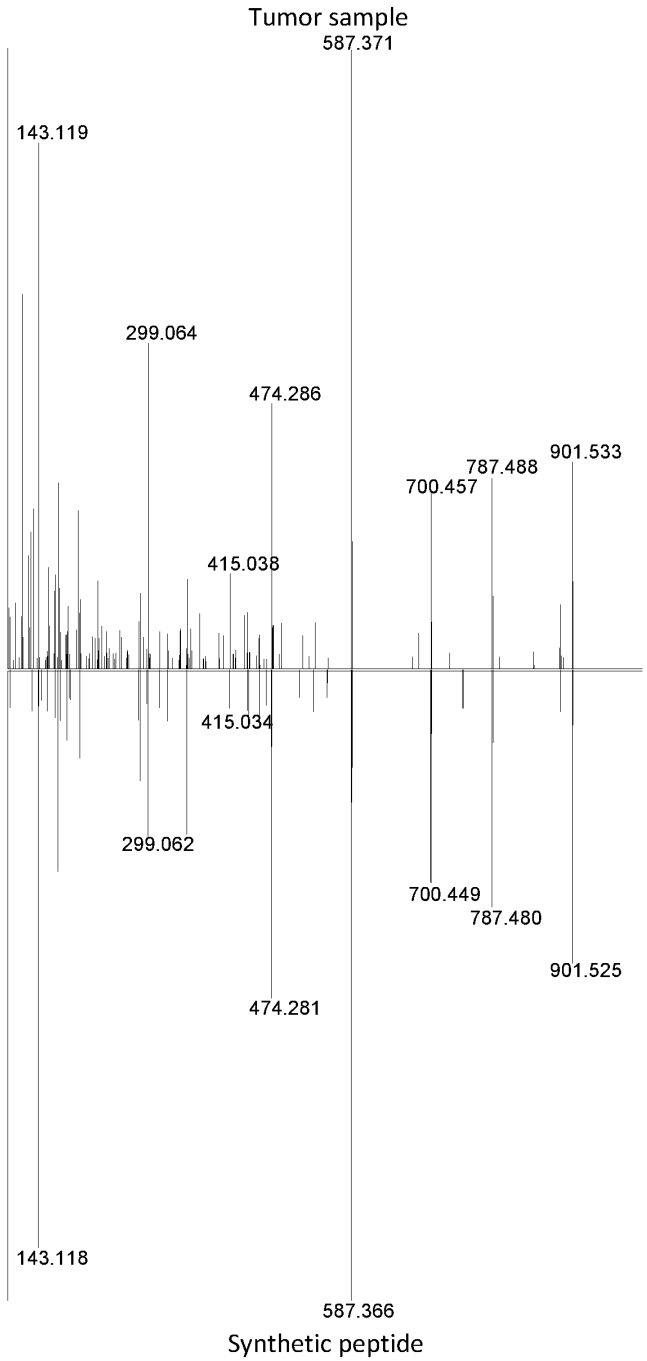

Intensity (%)
A P SK D H P L Y T A
100
50
y2
b2
b6-9
b9[2+]
y3
pre[2+]
b6
y6
b1-8
b8
b1-9
b9
y9
y10
m/z
200
400
600
800
1000
1200
AP
AT
SKDH
Y
LP
PL
PK3
Y
TA
P
bMaz
A* yMaz
Intensity (%)
m/z
200
400
600
800
1000
1200

Figure 14


Intensity (%)
R L F S E D I H V
100
50
b2
b3
b4-H2O
b1
y3
b4
y5-H2O
b5
y6
m/z
200
400
600
800
1000
Intensity (%)
LHV
bMax
FLR
yMax
m/z
200
400
600
800
1000

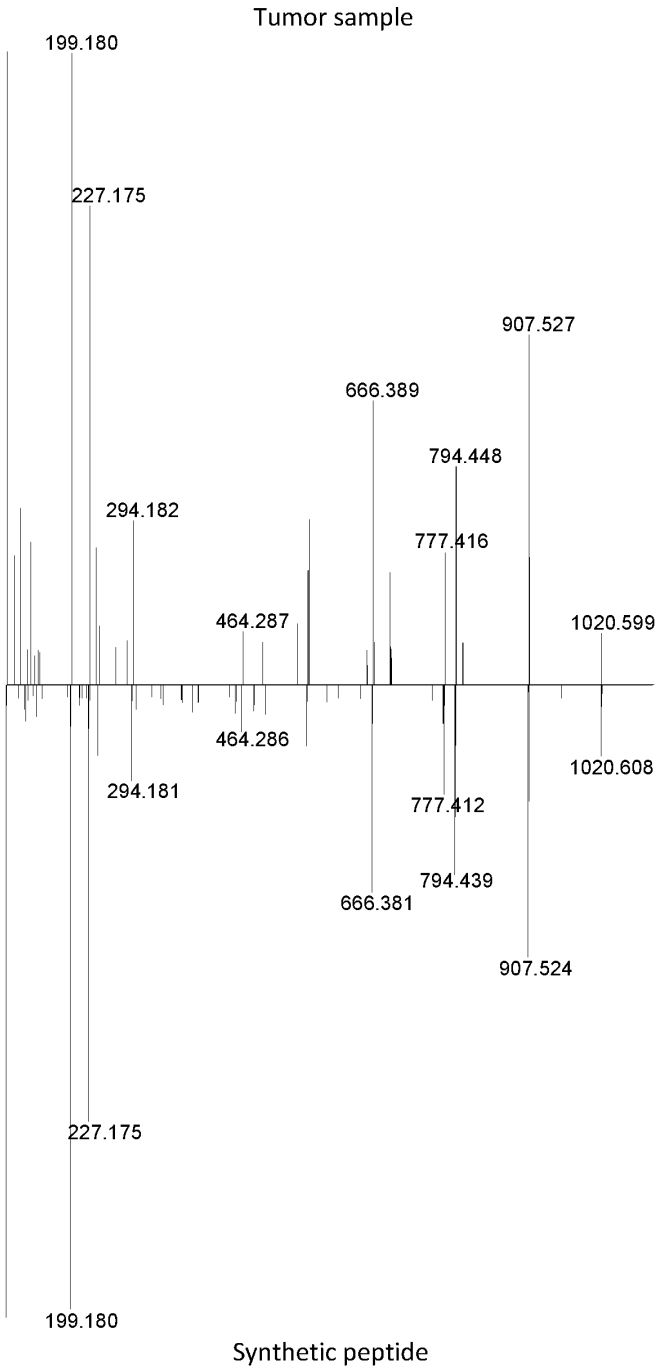
15/40

Figure 15



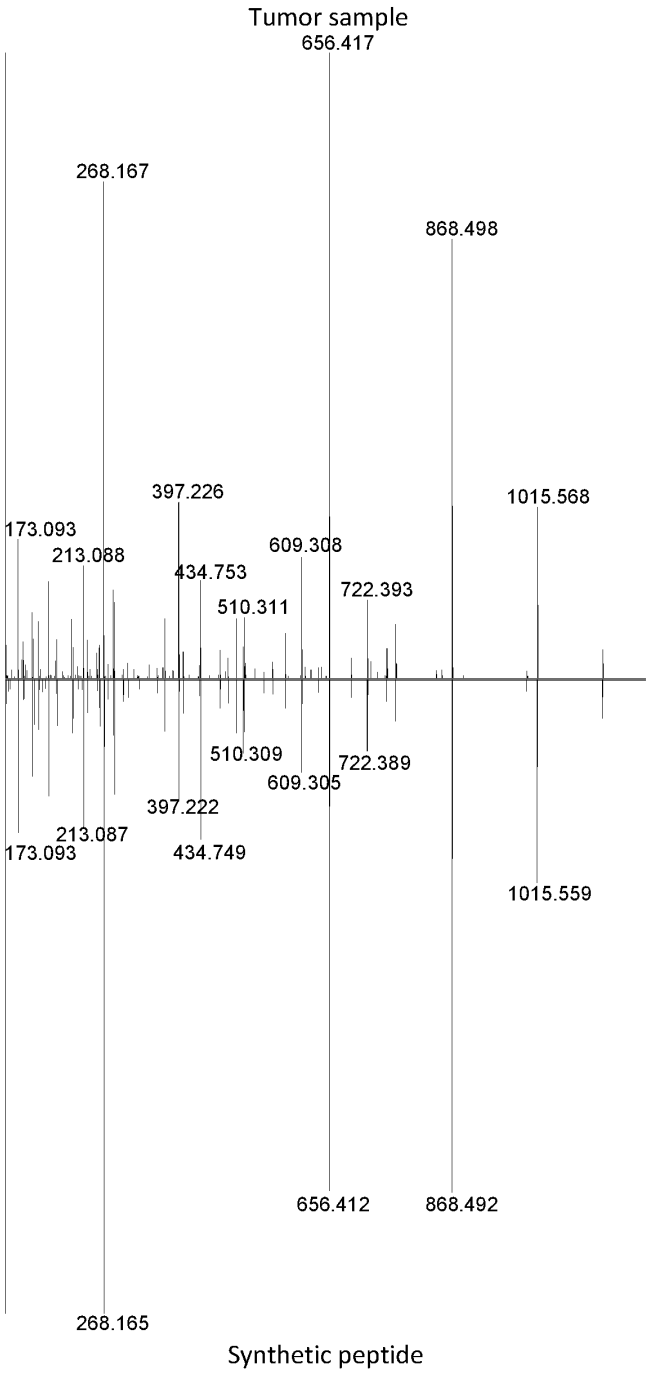
16/40

Figure 16



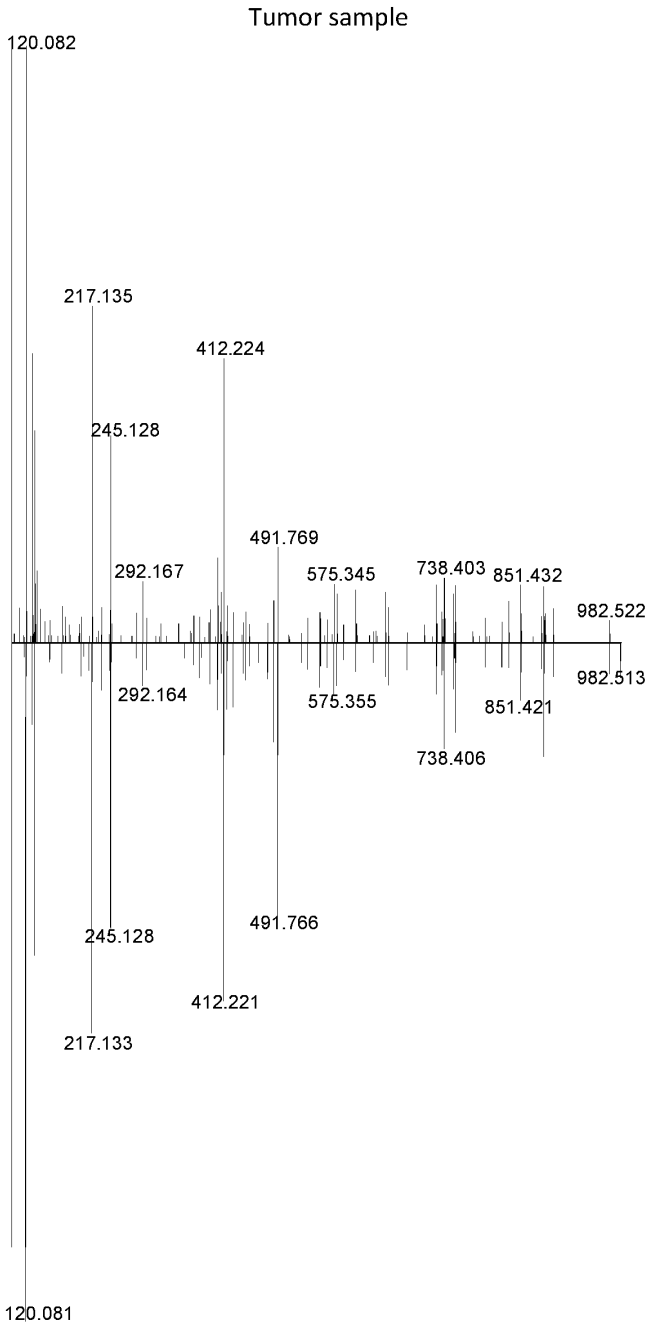
17/40

Figure 17



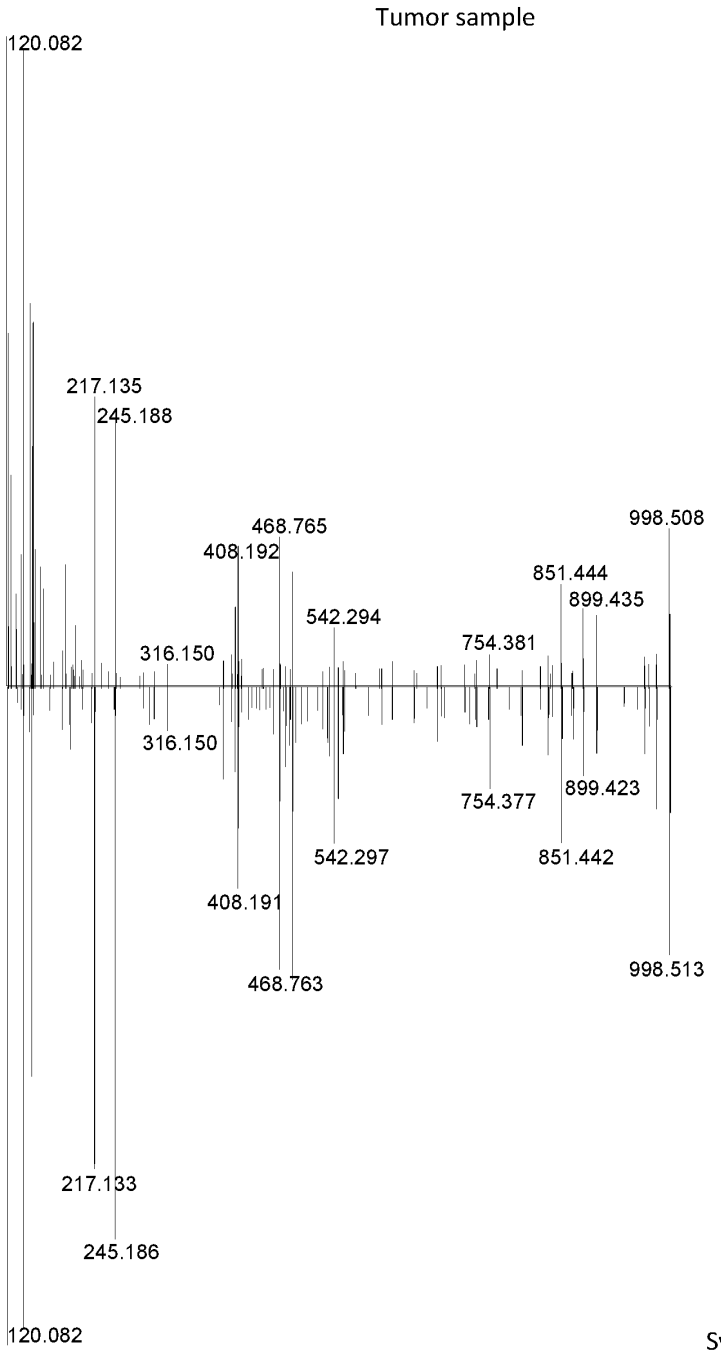
18/40

Figure 18



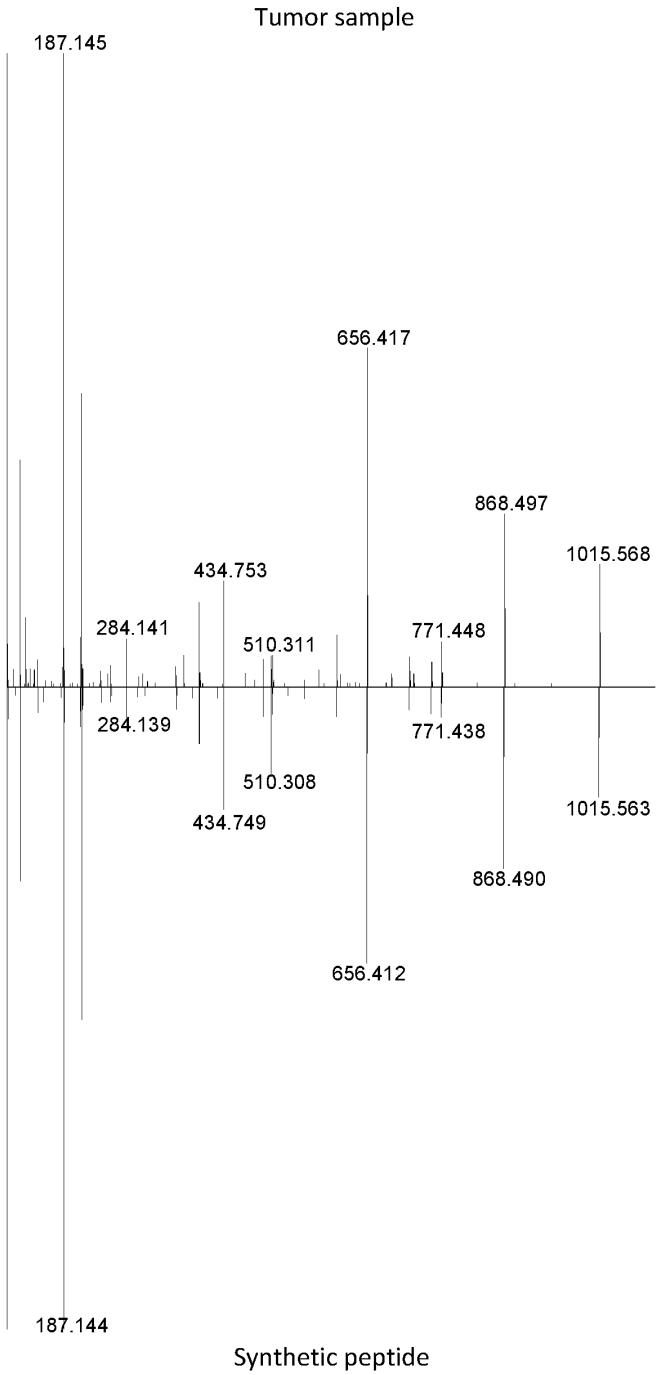
19/40

Figure 19



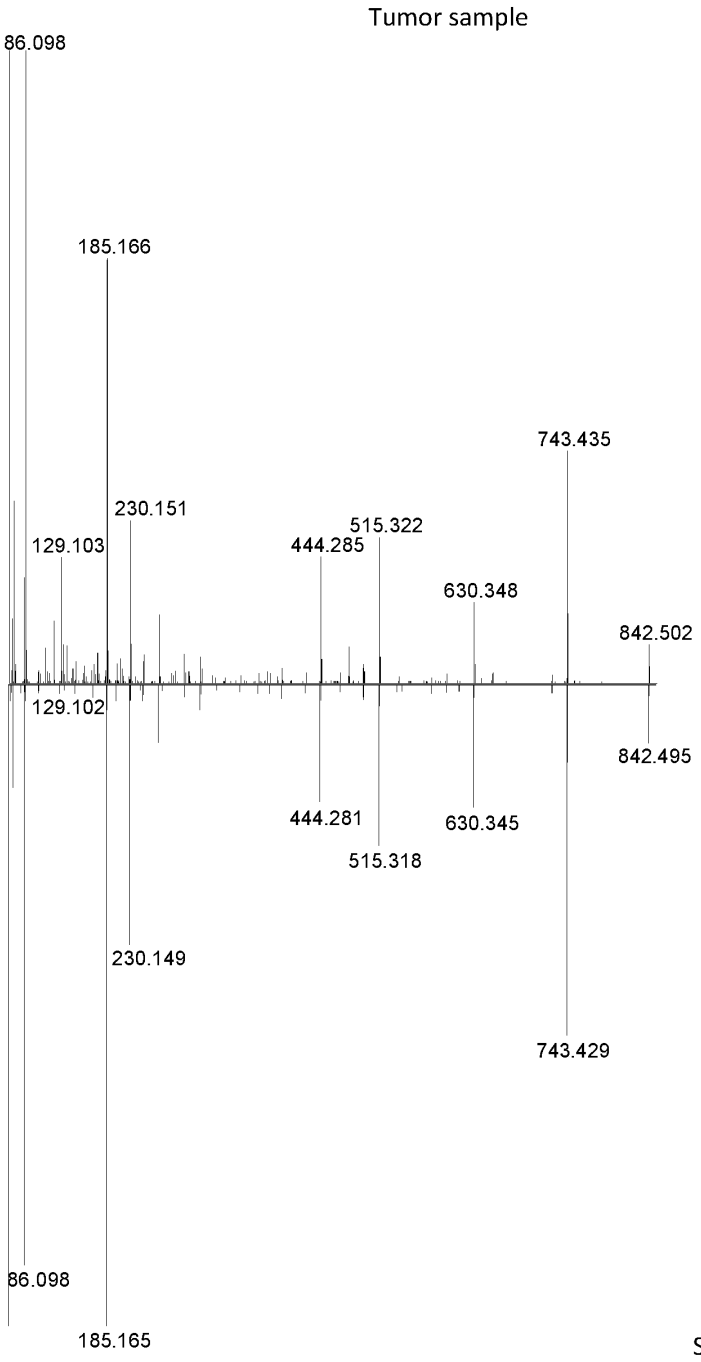
20/40

Figure 20



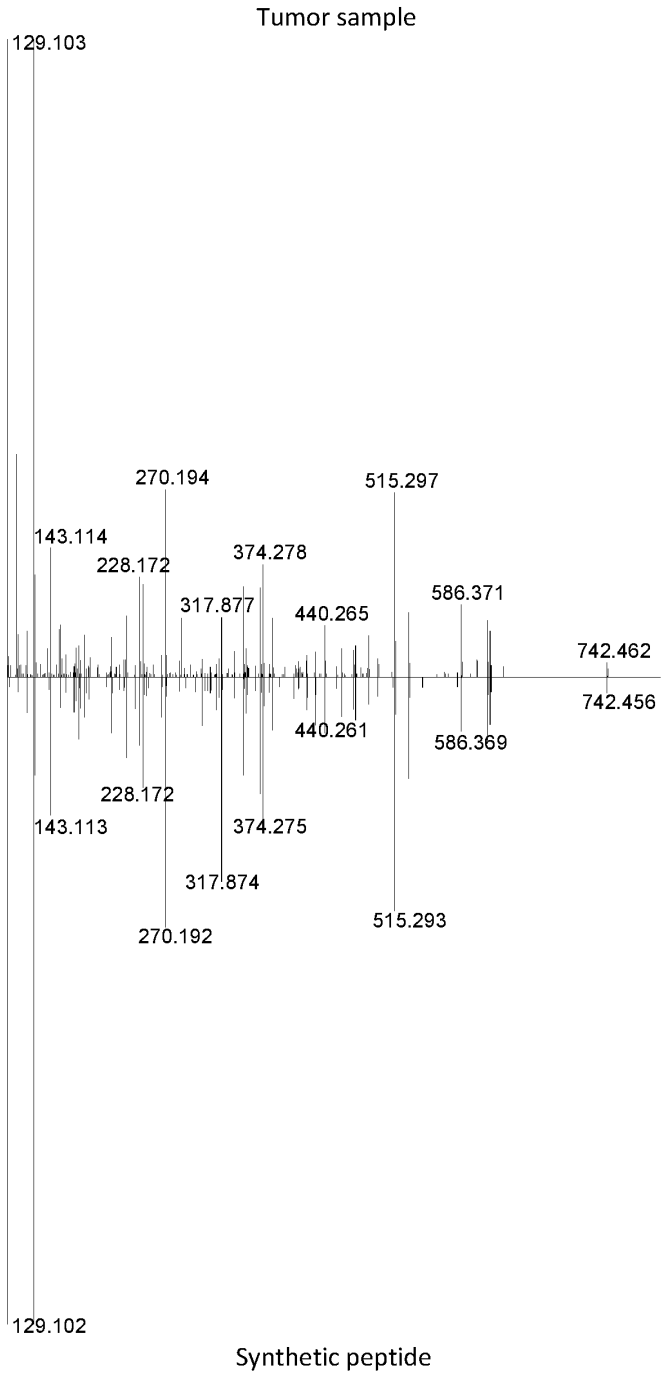
21/40

Figure 21



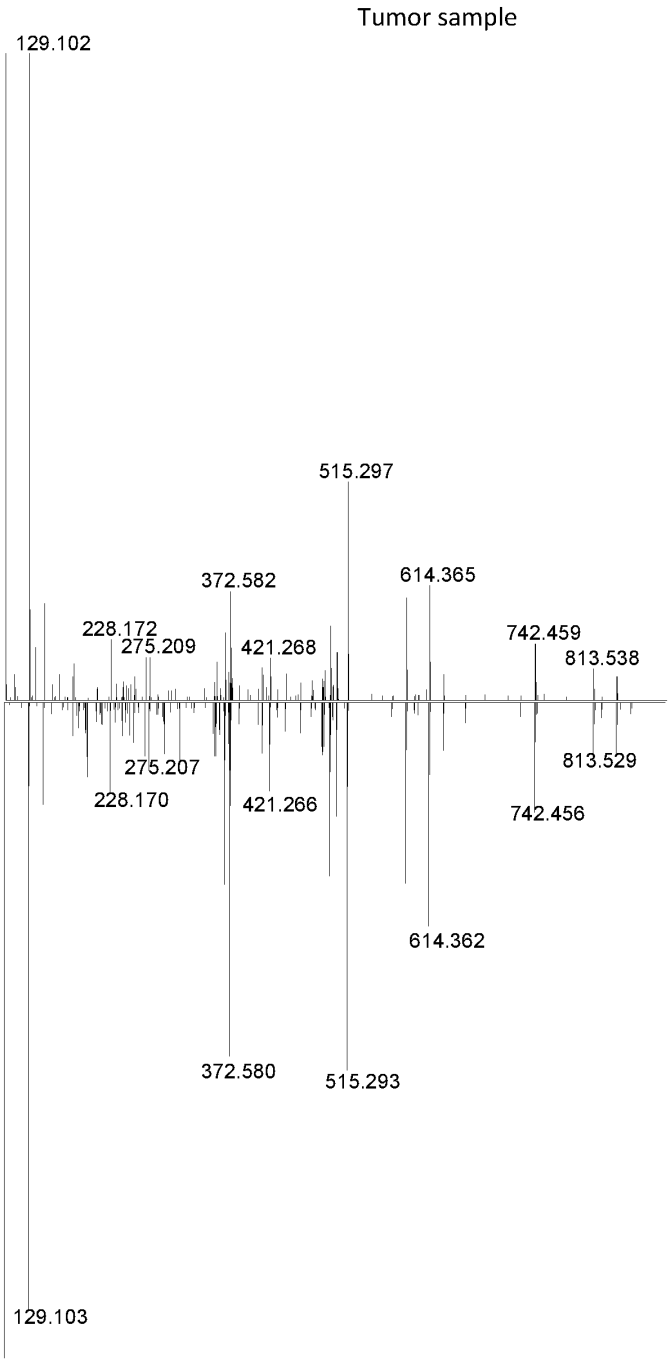
22/40

Figure 22



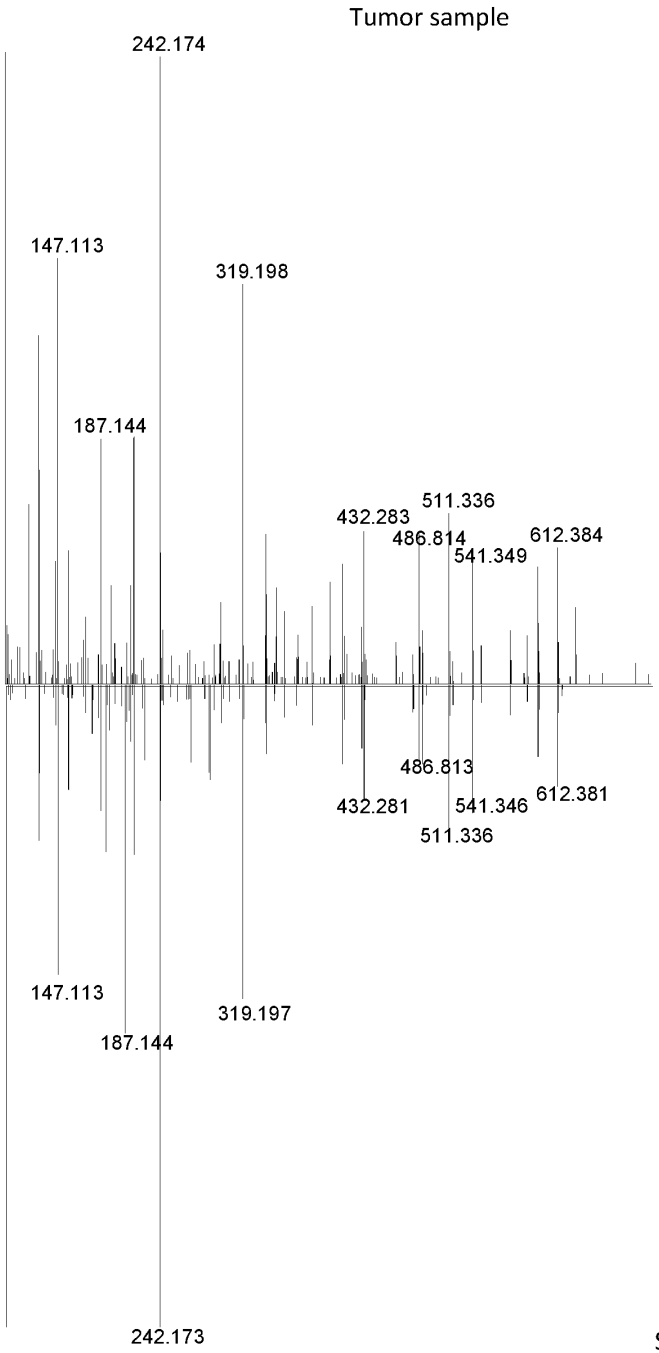
23/40

Figure 23



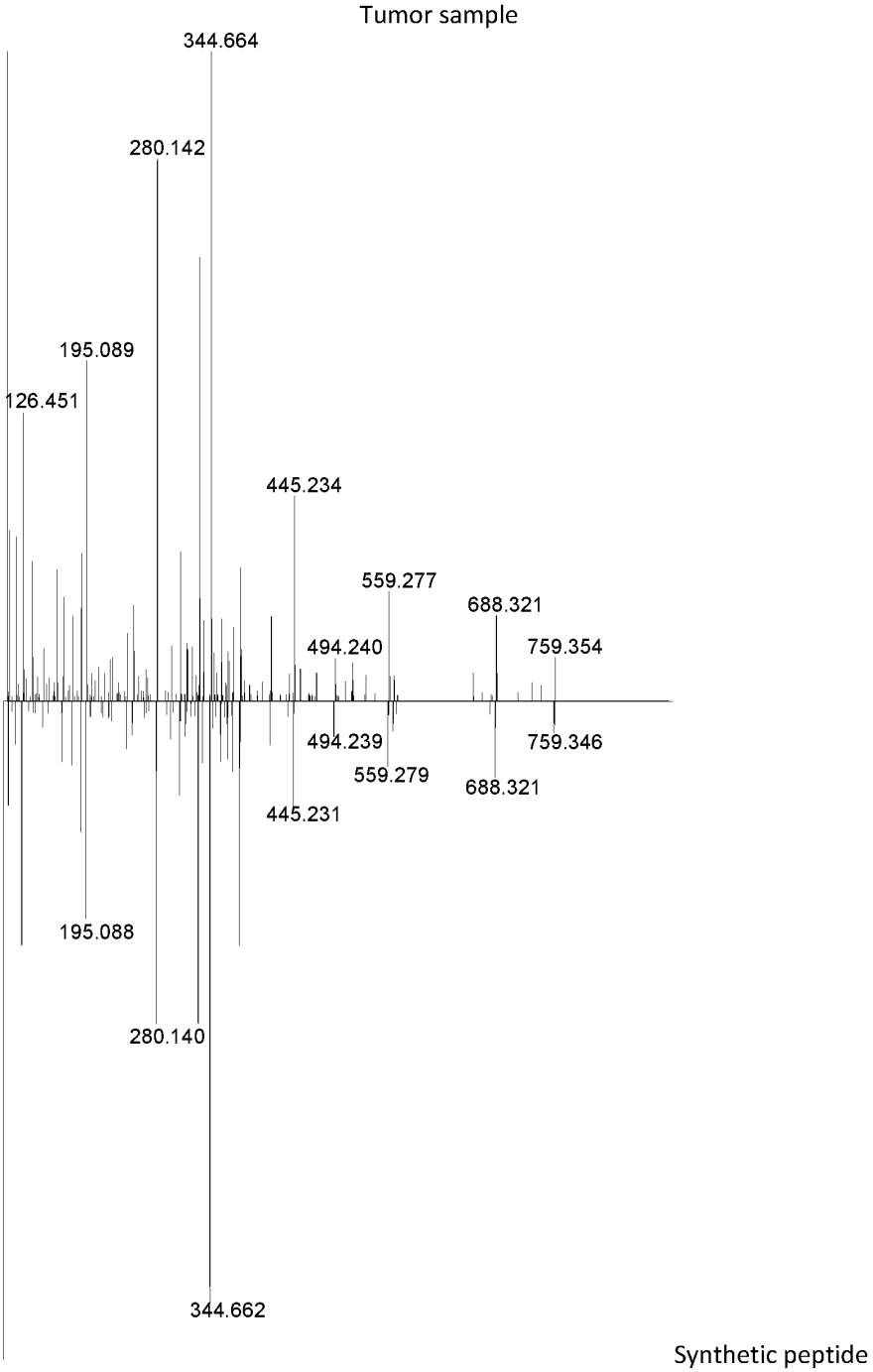
24/40

Figure 24



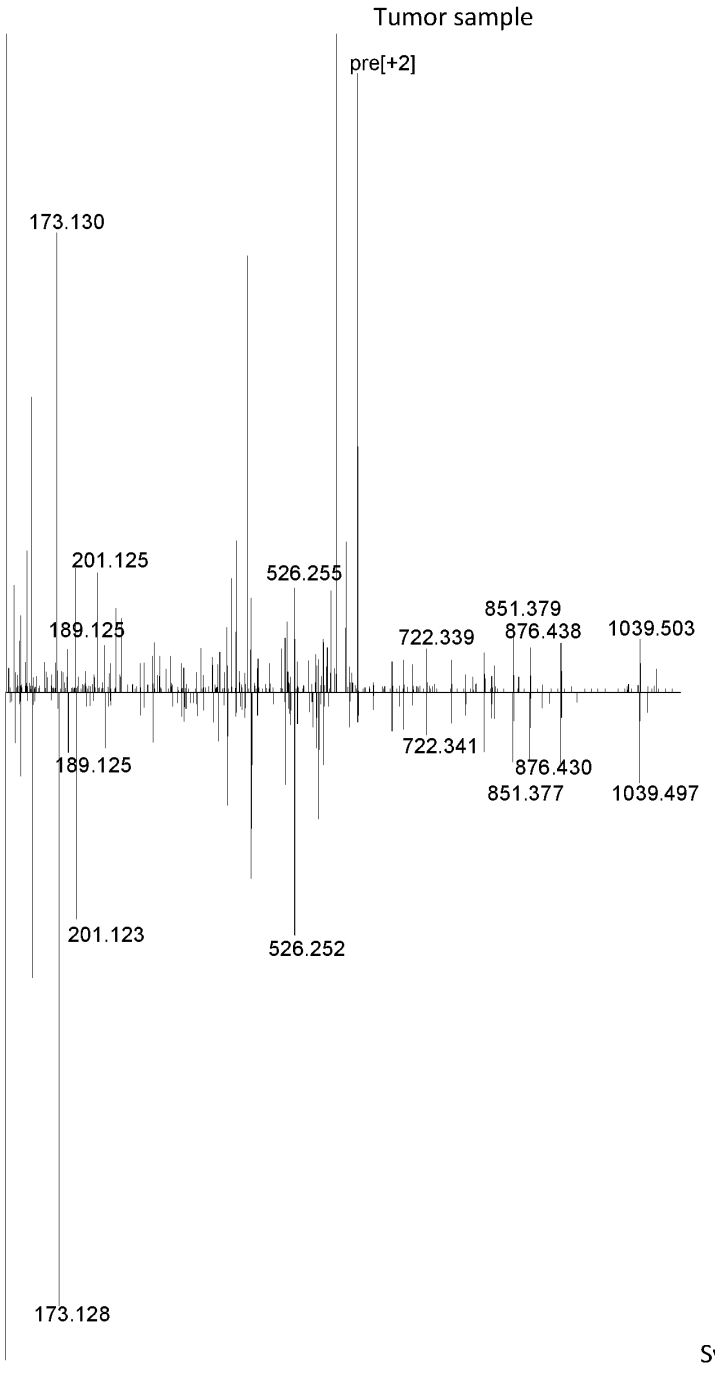
25/40

Figure 25



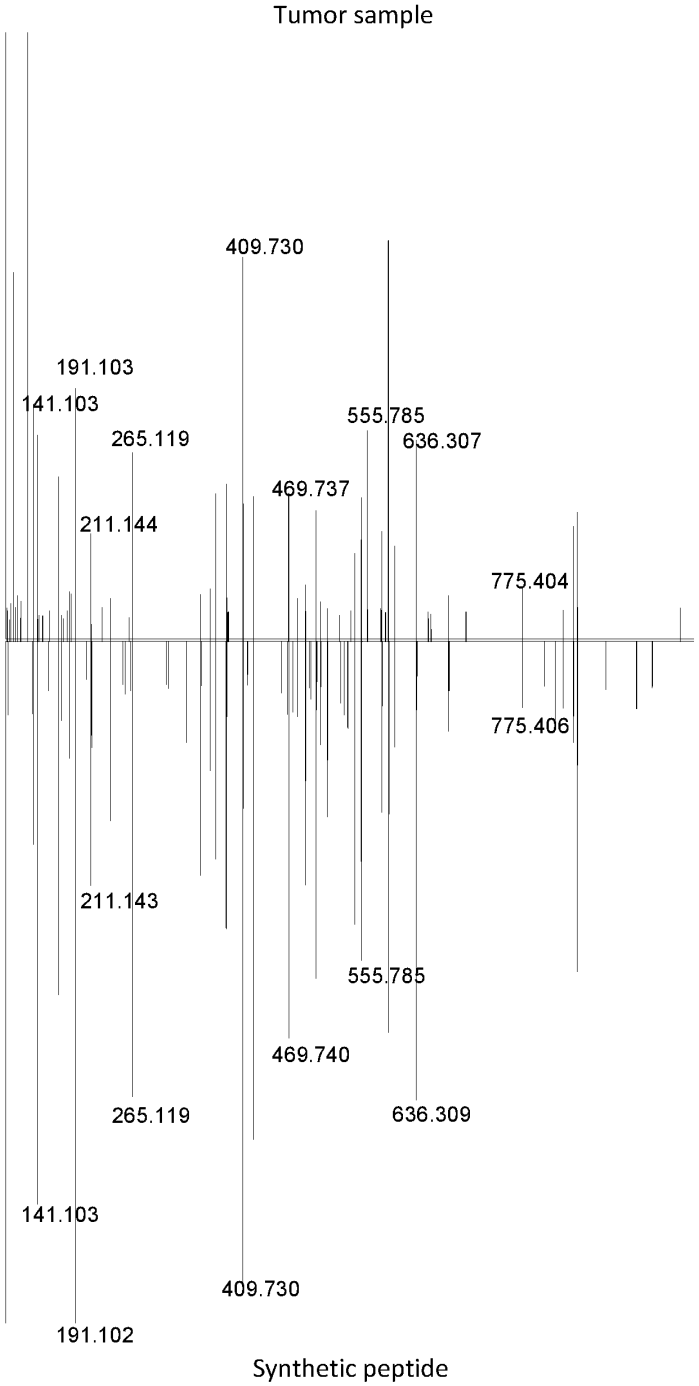
26/40

Figure 26



27/40

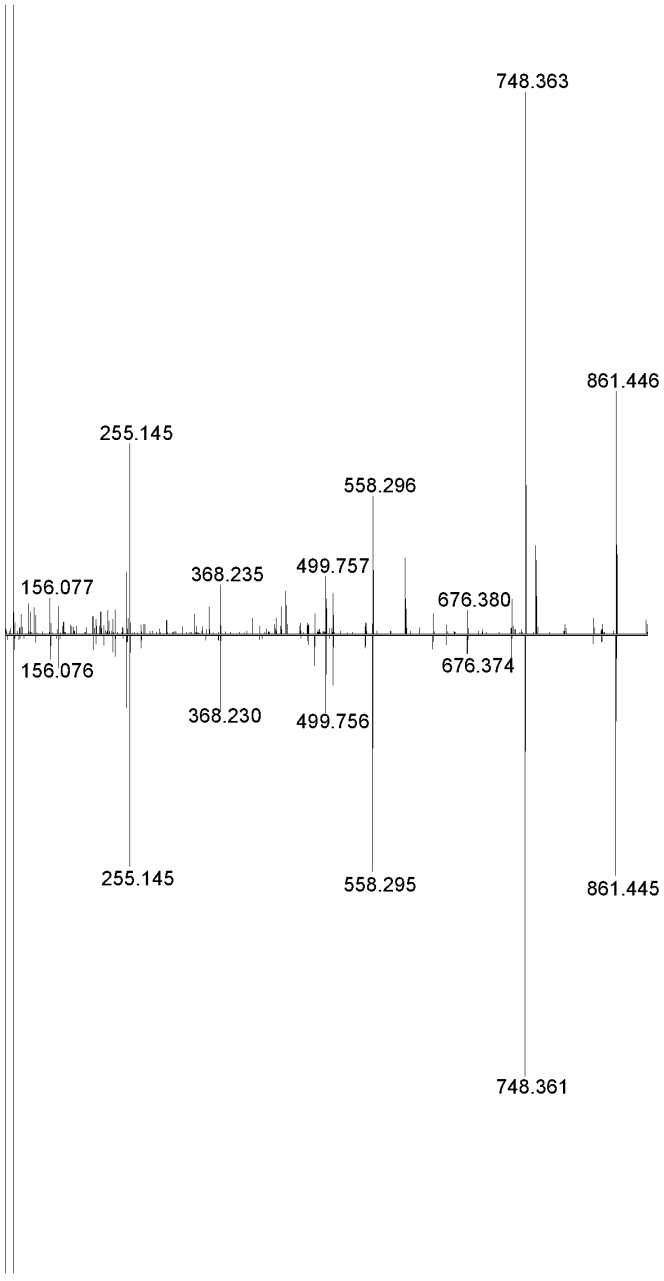
Figure 27



28/40

Figure 28

Tumor sample



Synthetic peptide

Figure 29

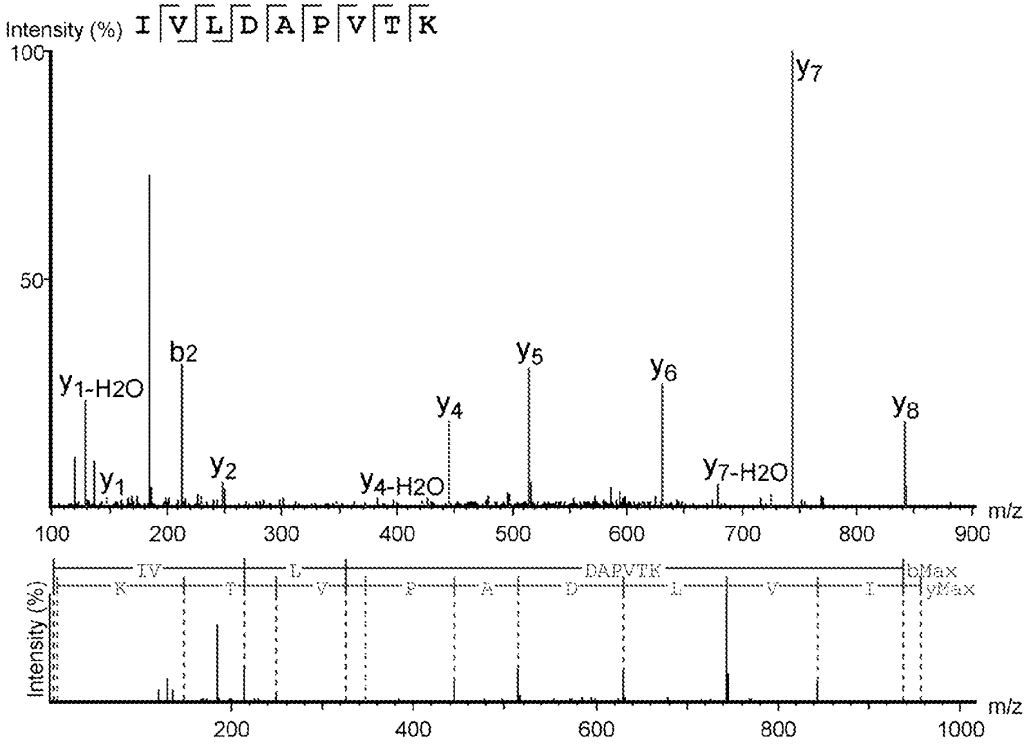

Intensity (%)
I V L D A P V T K
100
50
y7
b2
y1-H2O
y5
y6
y4
y8
y1
y2
y4-H2O
y7-H2O
m/z
100
200
300
400
500
600
700
800
900
IV
L
DAPVTK
bMax
K
T
V
P
A
D
L
V
I
yMax
Intensity (%)
m/z
200
400
600
800
1000

Figure 30

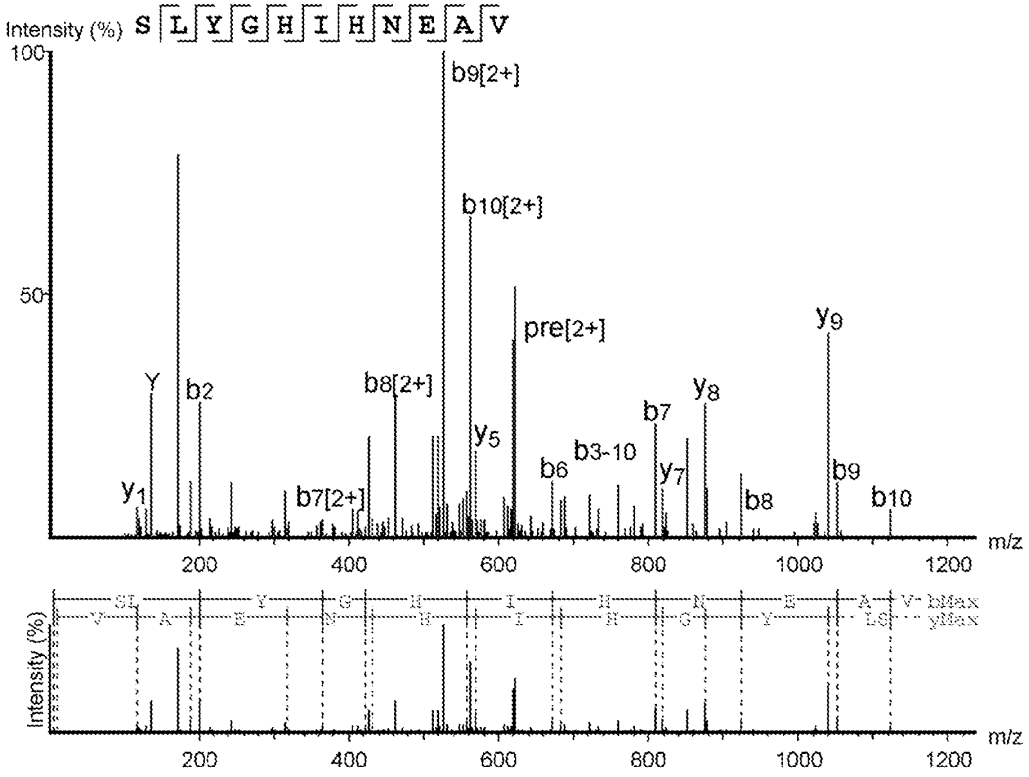

Intensity (%)
S L Y G H I H N E A V
100
50
b9[2+]
b10[2+]
pre[2+]
y9
Y
b2
b8[2+]
y8
b7
y5
b3-10
b6
y7
b9
y1
b7[2+]
b8
b10
m/z
200
400
600
800
1000
1200
Intensity (%)
bMax
yMax
m/z
200
400
600
800
1000
1200

Figure 31

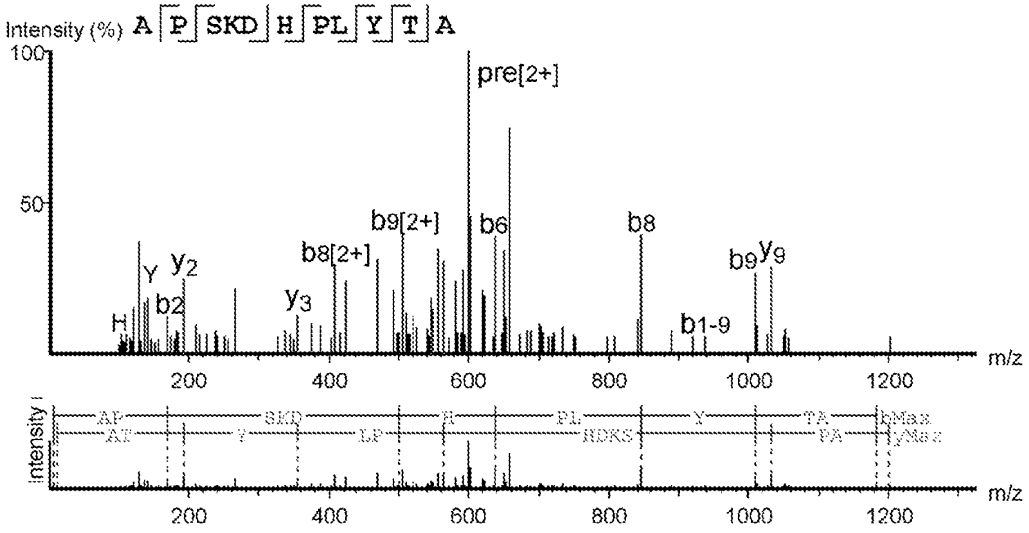

Intensity (%)
A P SKD H PL Y T A
100
50
pre[2+]
b9[2+]
b6
b8
b8[2+]
b9
y9
y2
y3
b2
b1-9
m/z
200
400
600
800
1000
1200
Intensity
AP
SKD
H
PL
Y
TA
AT
LP
HDKS
PA
m/z
200
400
600
800
1000
1200

Figure 32

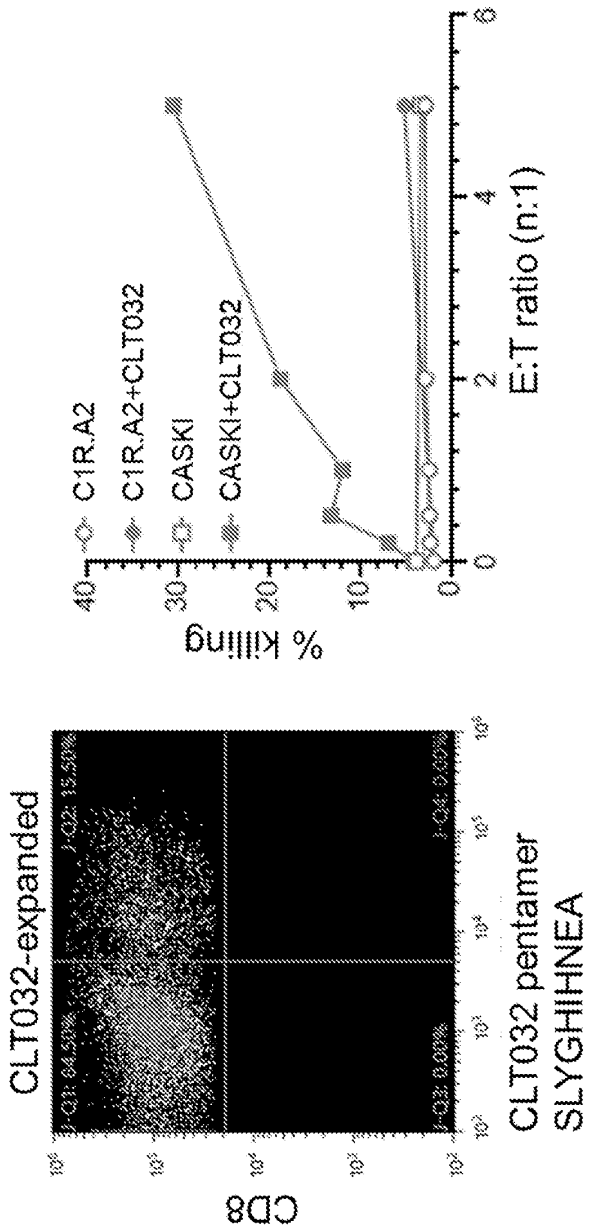

% killing
E:T ratio (n:1)
C1R.A2
C1R.A2+CLT032
CASKI
CASKI+CLT032
CLT032-expanded
CD8
CLT032 pentamer
SLYGHIHNEA

Figure 33

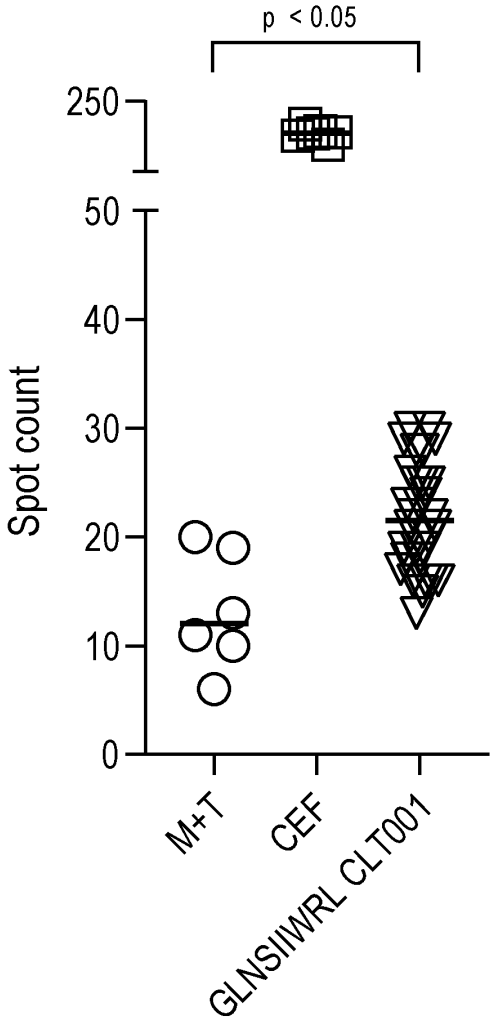


Figure 34

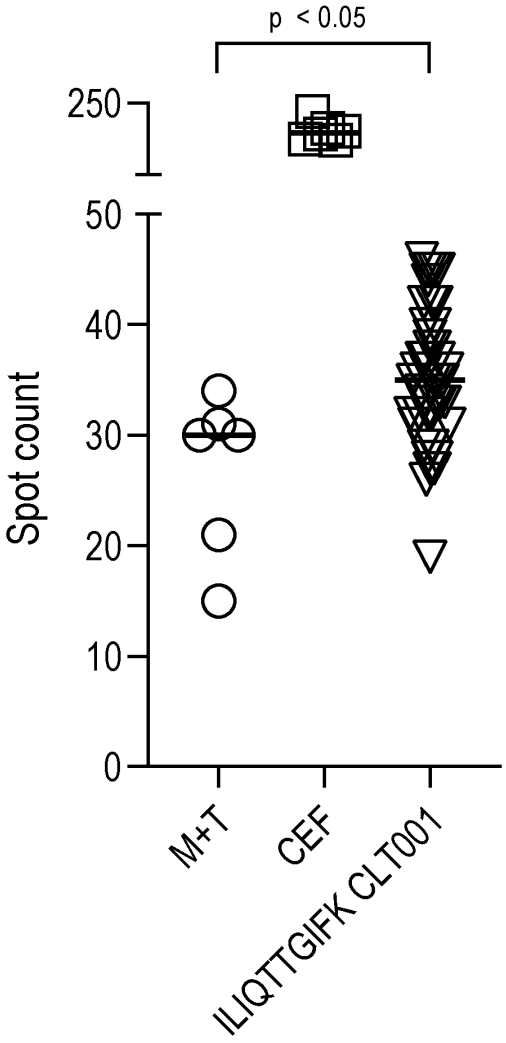


Figure 35

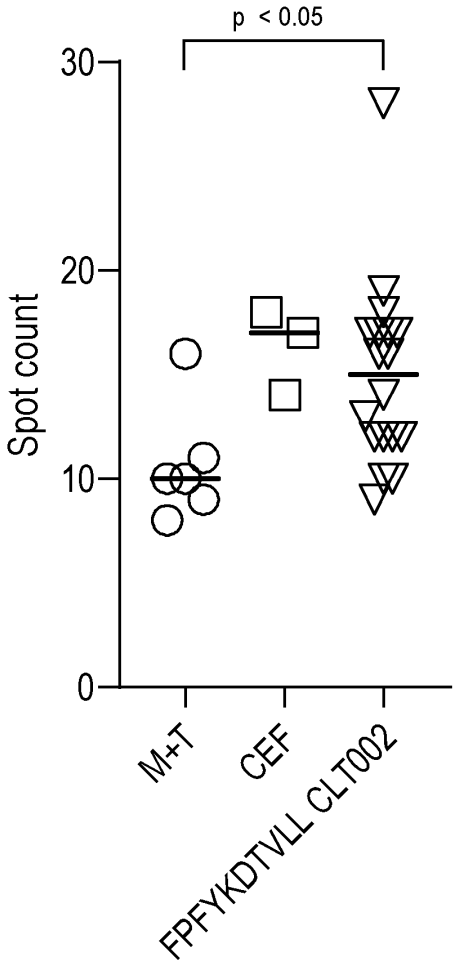


Figure 36

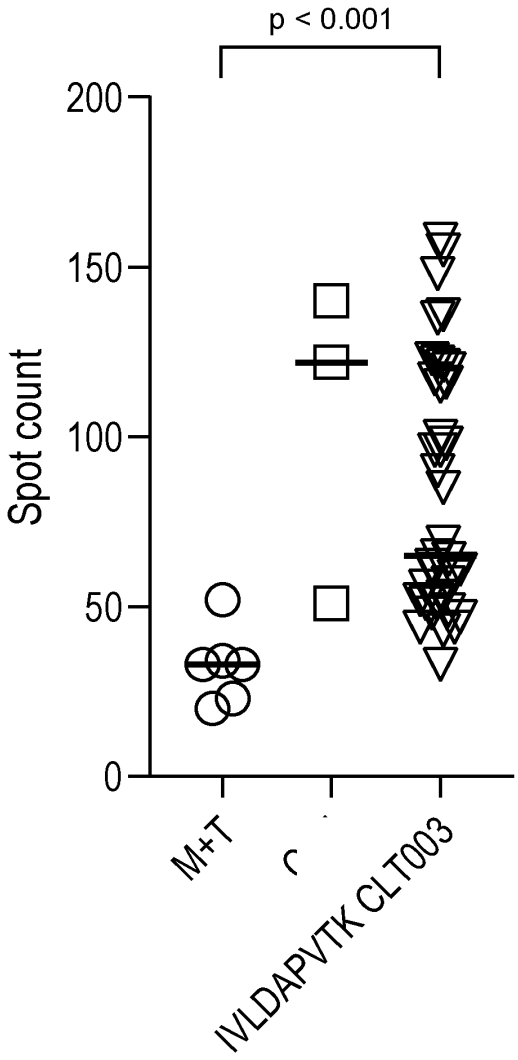


Figure 37

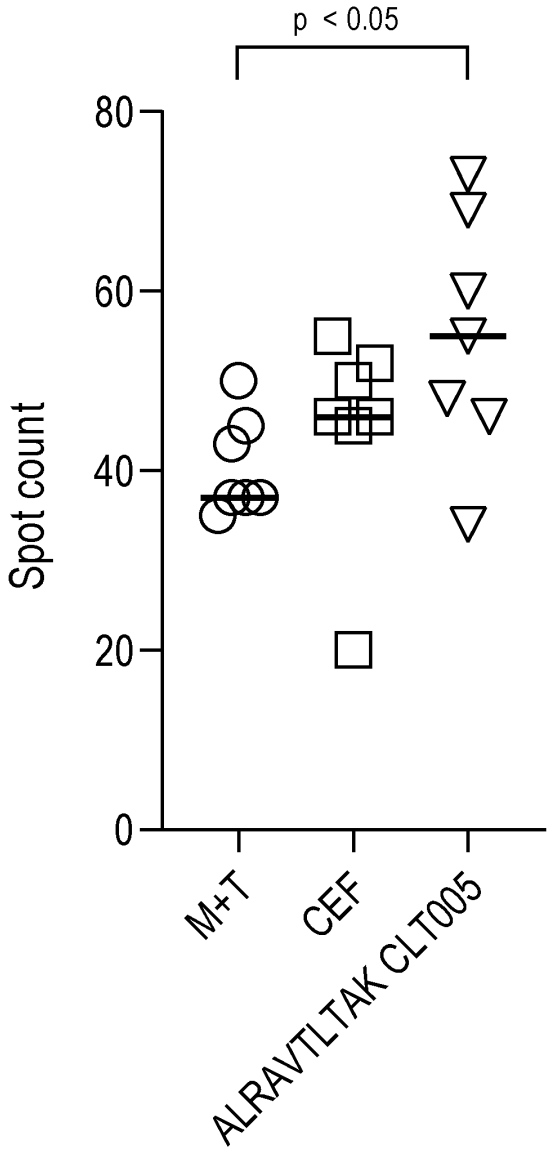


Figure 38

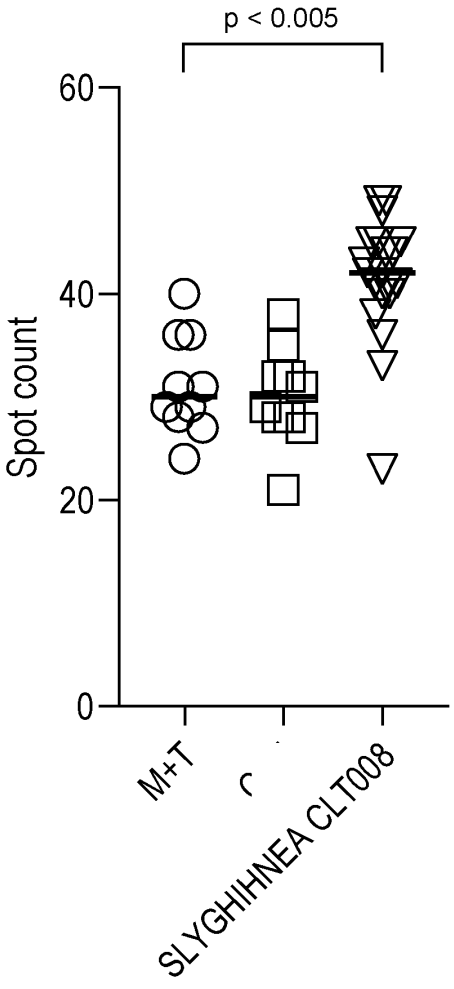
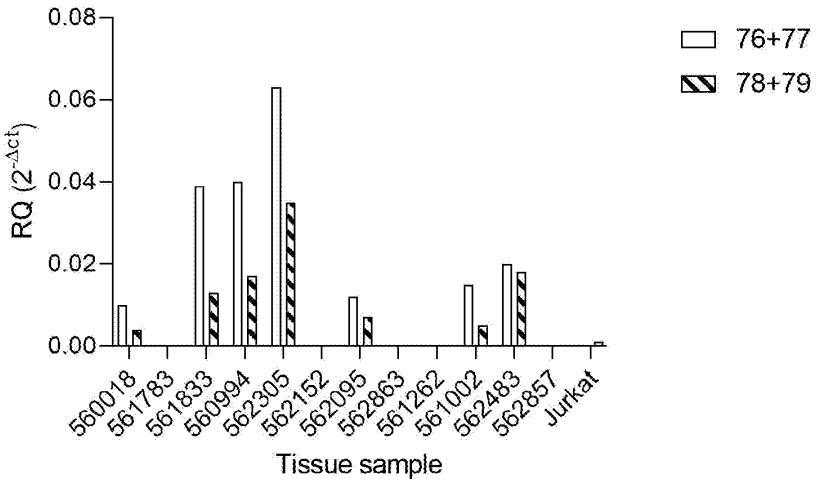


Figure 39

Panel A



Panel B

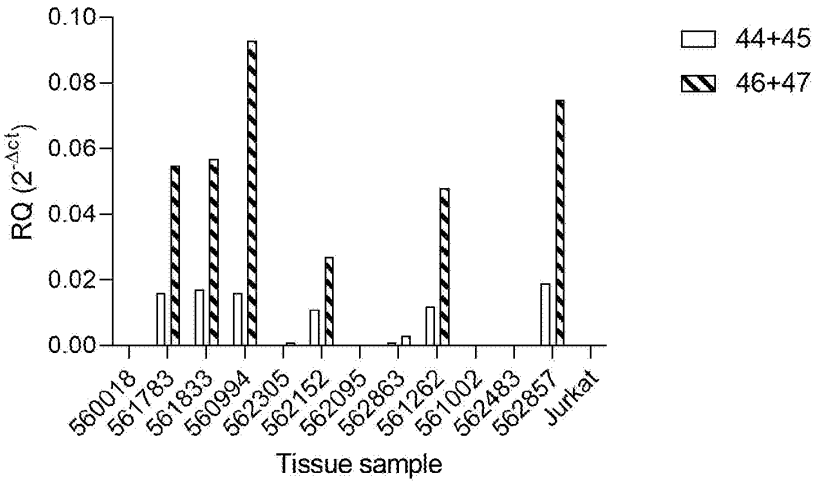


Figure 39 (cont.)

Panel C

