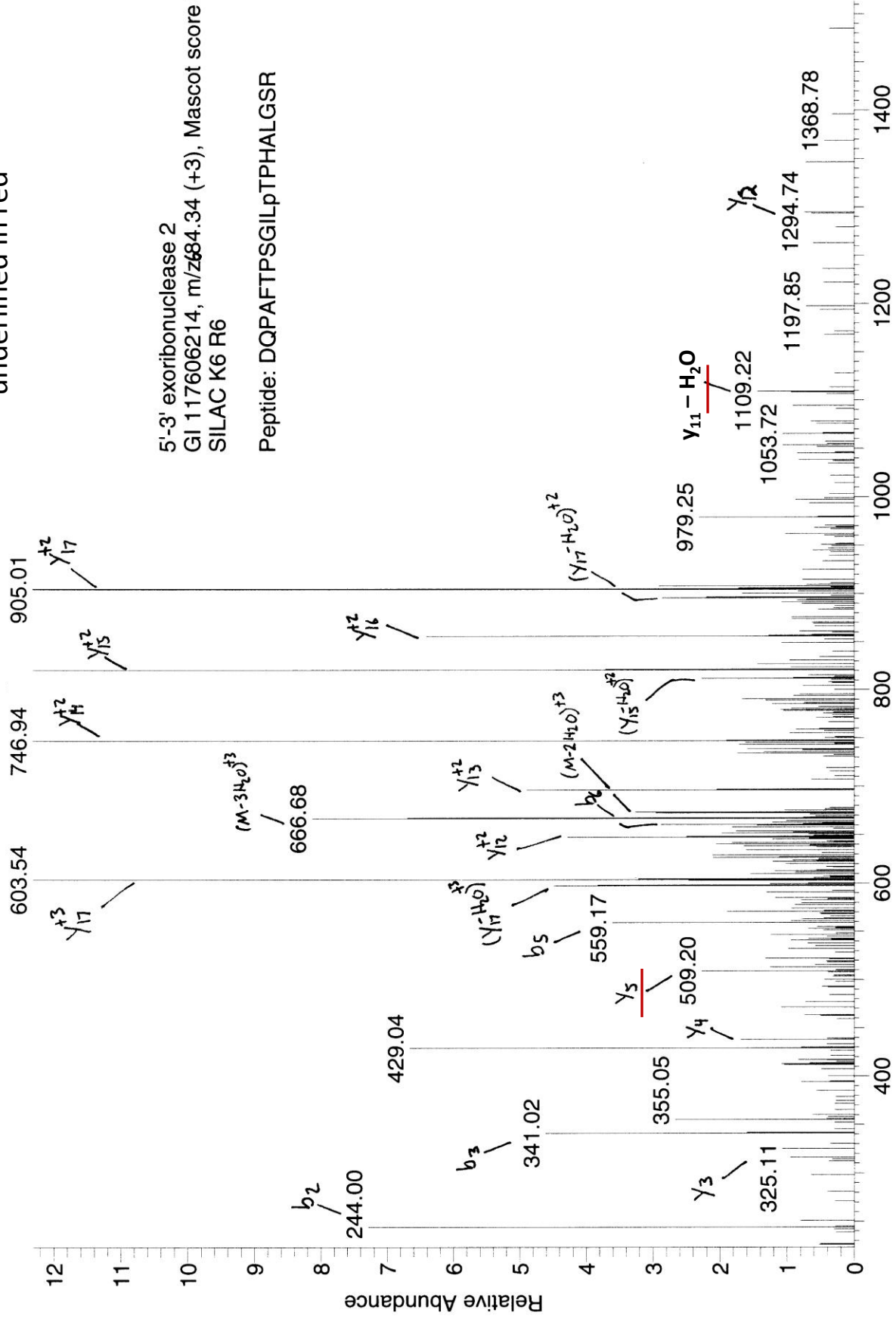


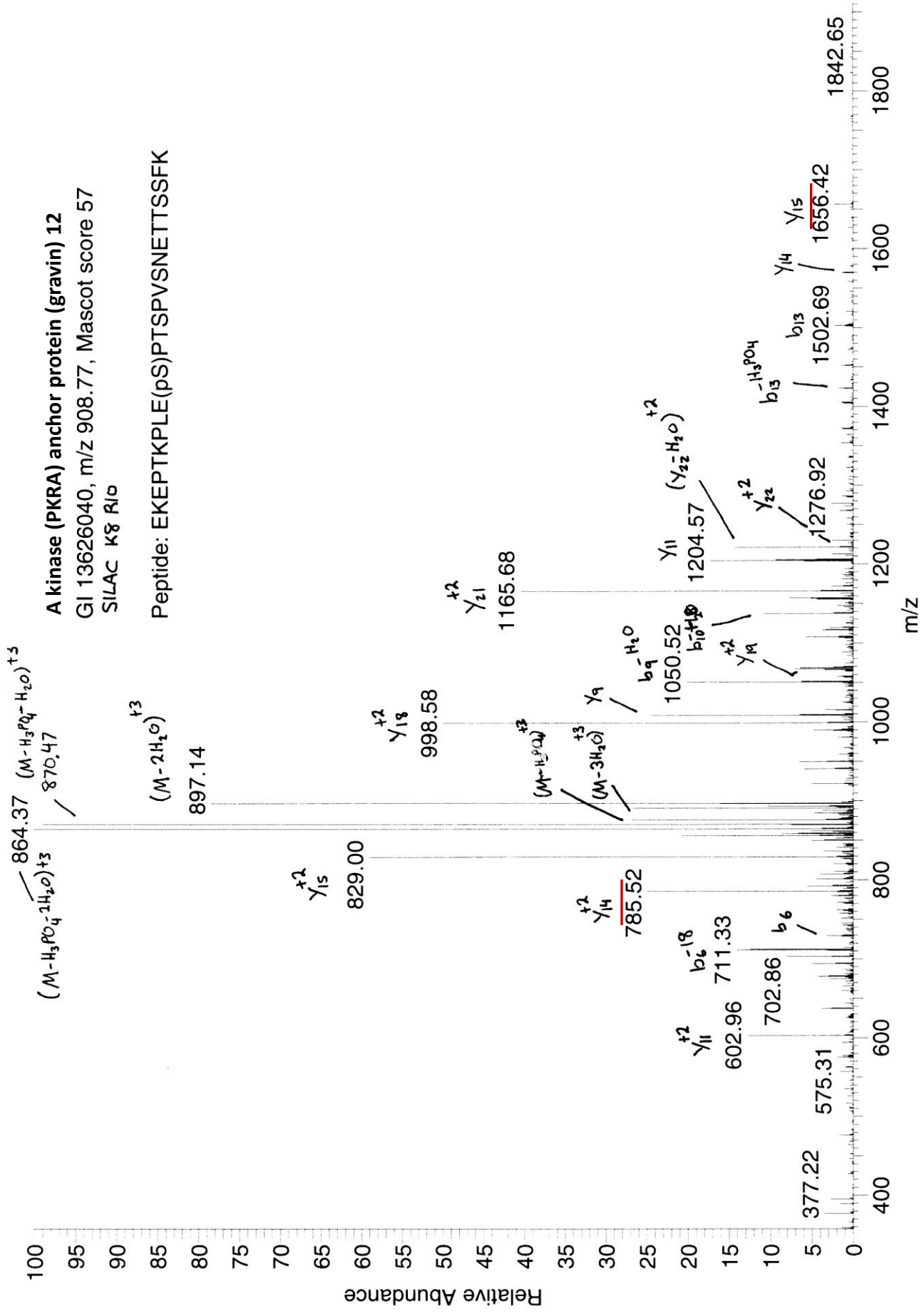
Peaks constraining the position of the phosphorylation site are underlined in red

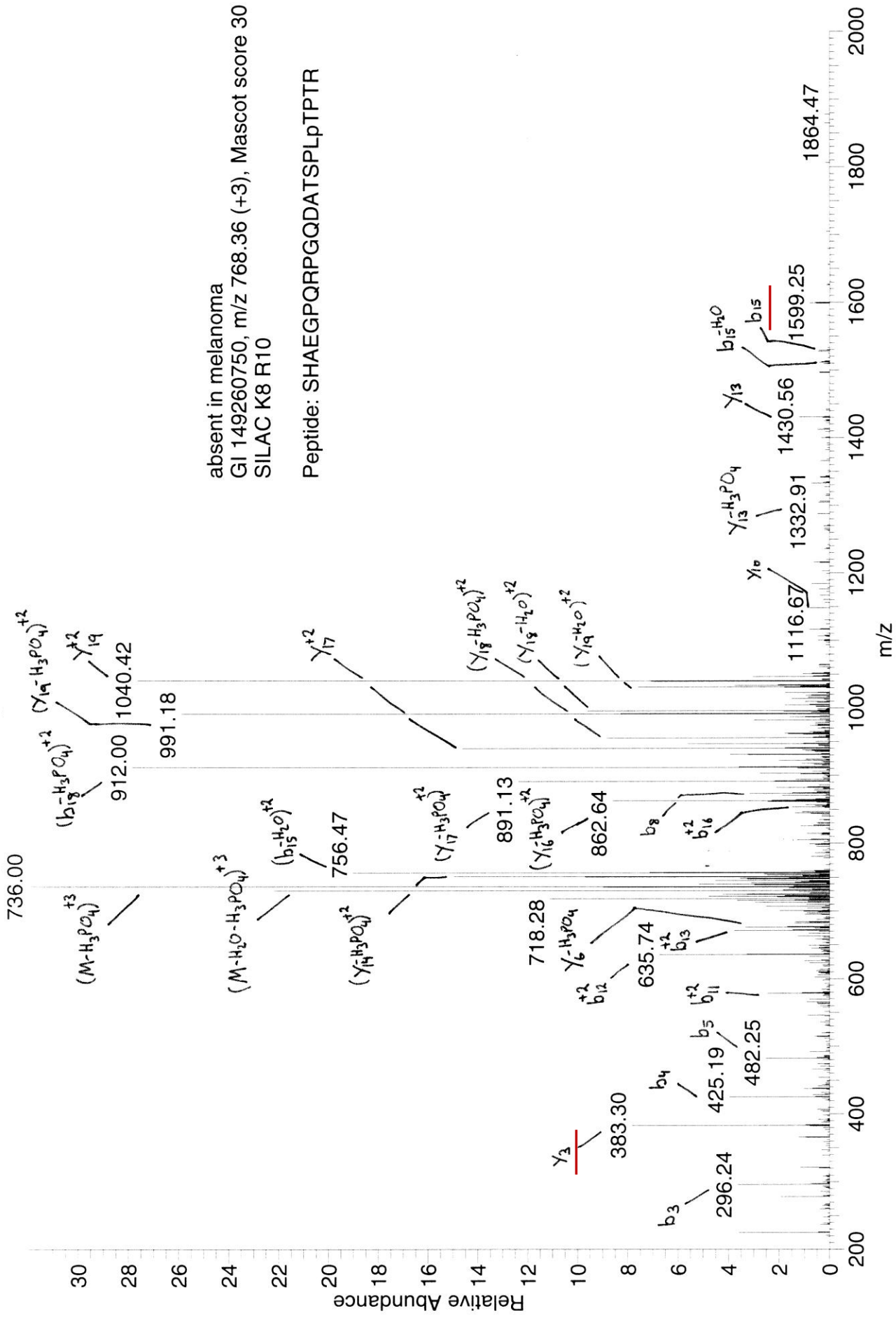
5'-3' exoribonuclease 2
 GI 117606214, m/z 684.34 (+3), Mascot score 33
 SILAC K6 R6

Peptide: DQPAFTPSGILpTPHALGSR



A kinase (PKRA) anchor protein (gravin) 12
 GI 13626040, m/z 908.77, Mascot score 57
 SILAC K8 R10
 Peptide: EKEPTKPLE(pS)PTSPVSNETTSSFK



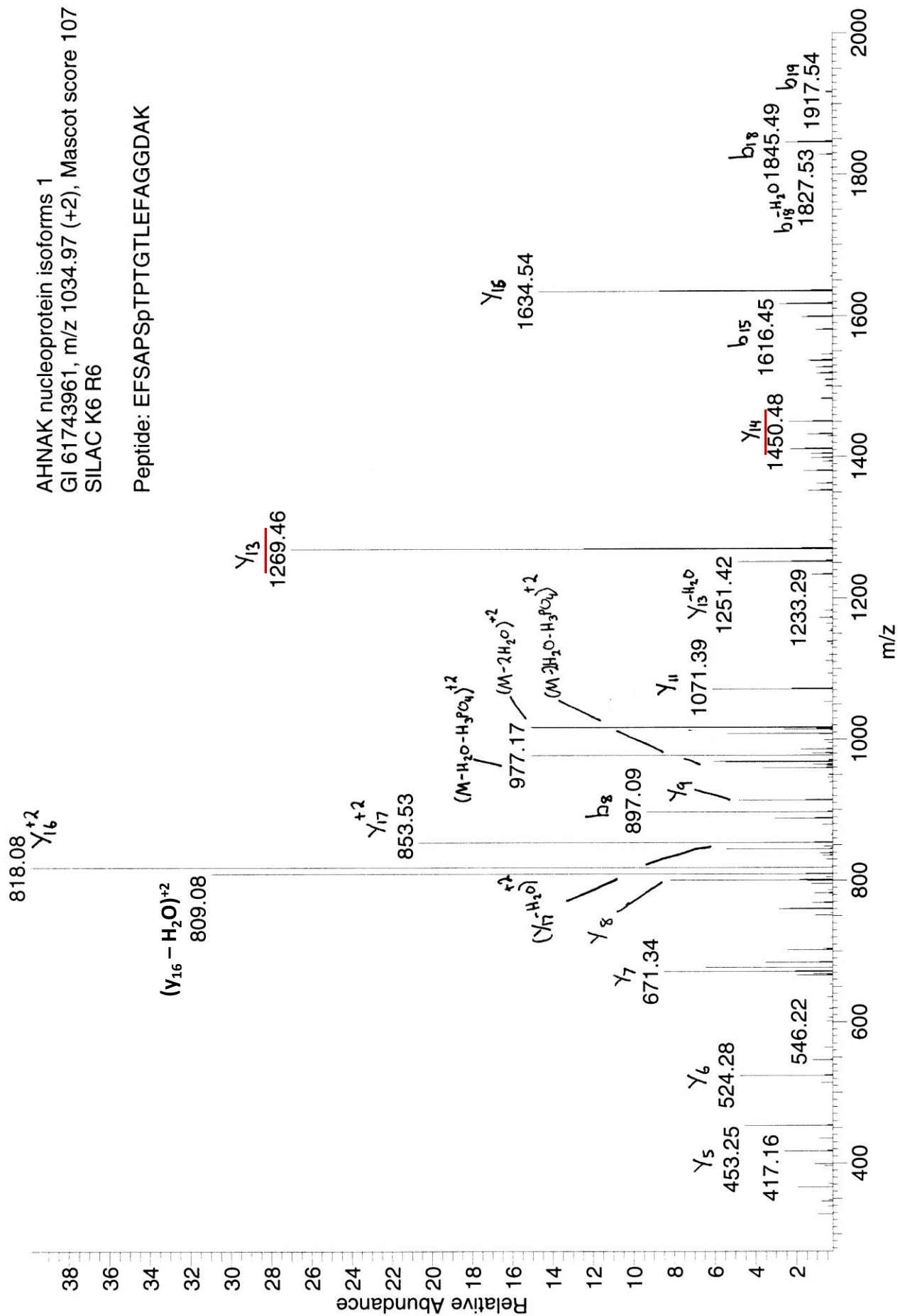


absent in melanoma
 GI 149260750, m/z 768.36 (+3), Mascot score 30
 SILAC K8 R10

Peptide: SHAEGPQRPGQDATSPLpTPTR

AHNAK nucleoprotein isoforms 1
 GI 61743961, m/z 1034.97 (+2), Mascot score 107
 SILAC K6 R6

Peptide: EFSAPSpTPTGTLEFAGGDAK



591.78

AHNAK nucleoprotein isoform 1
GI 61743961, m/z 640.83 (+2), Mascot score 50
SILAC K8 R10

Peptide: FKAEAPLPSPK

45

40

35

30

25

20

15

10

5

0

Relative Abundance

$(M-H_3PO_4)^{+2}$

γ_6

726.23

997.46

γ_9

γ_4

516.28

b_5

b_7

765.39

γ_1

797.49

$\gamma_4-H_3PO_4$

418.30

b_4

$(M-H_2O)^{+2}$

631.74

555.24

b_1-H_2O

484.35

b_5-H_2O

466.22

719.37

691.49

882.42

949.65

997.46

1029.20

931.58

908.33

899.54

$\gamma_9-H_3PO_4$

$b_9-H_3PO_4$

355.33

b_3

337.34

b_5-H_2O

284.24

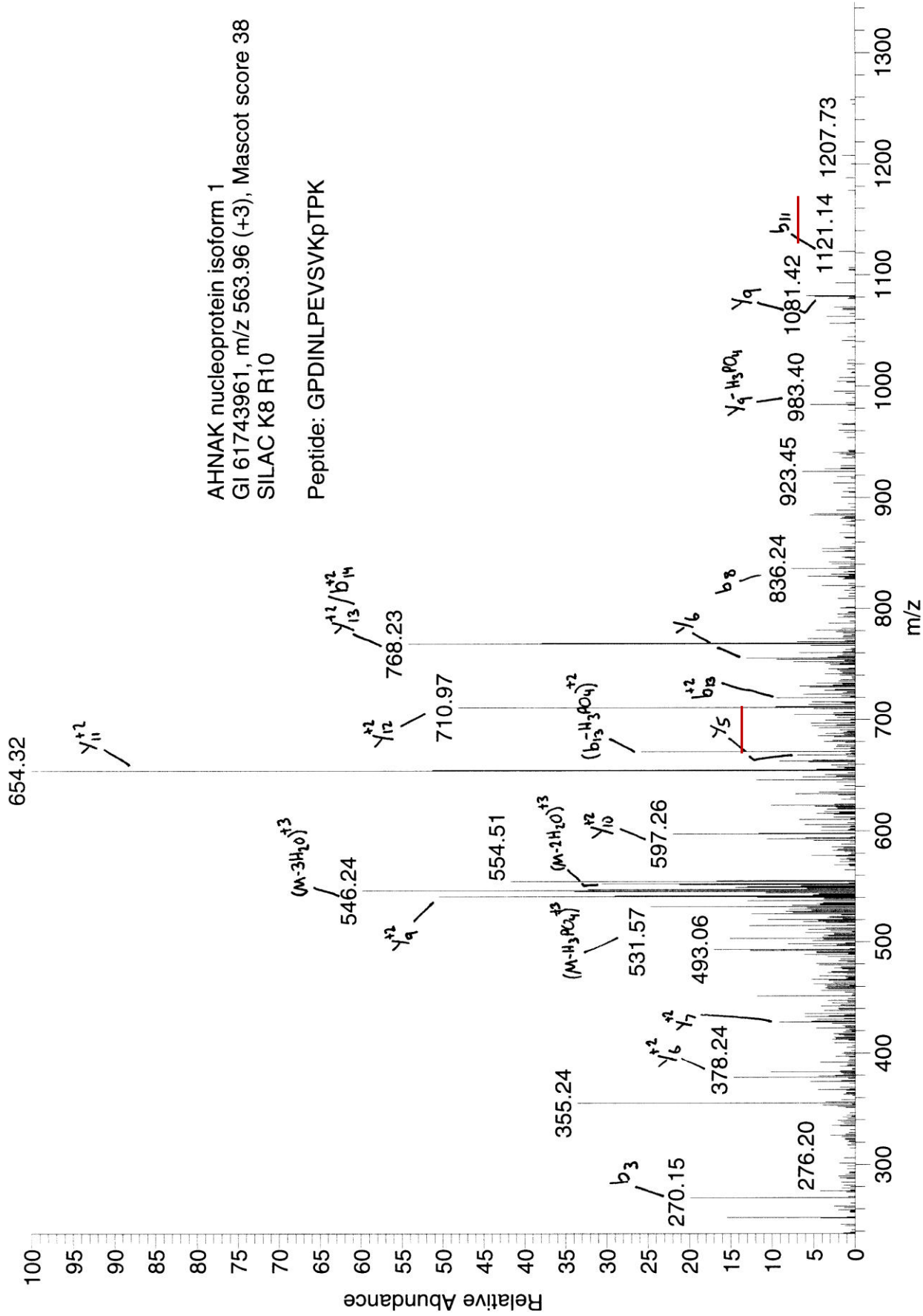
b_2

365.34

b_3

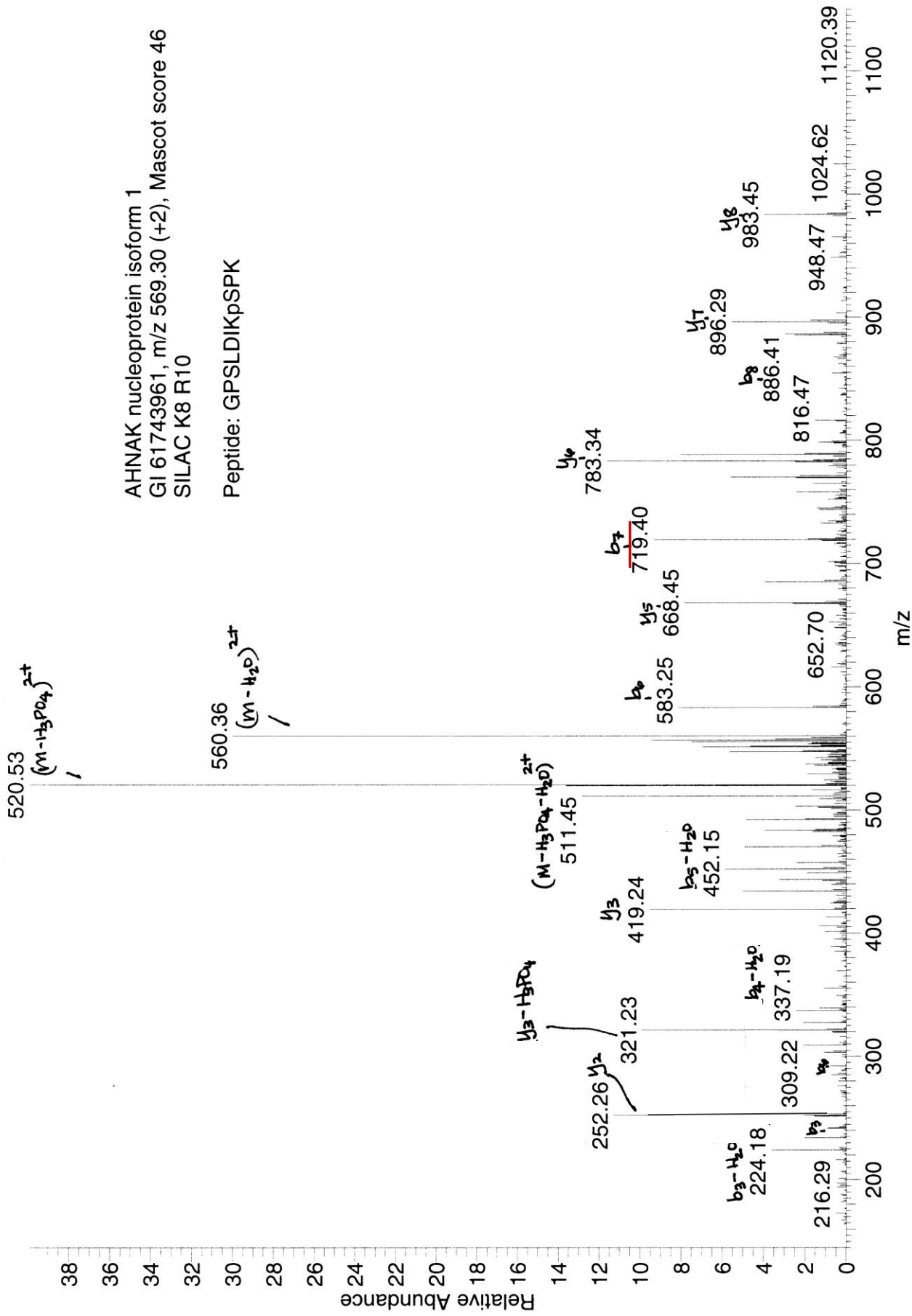
b_5-H_2O

m/z



AHNAK nucleoprotein isoform 1
 GI 61743961, m/z 563.96 (+3), Mascot score 38
 SILAC K8 R10

Peptide: GPDINLPEVSVKpTPK

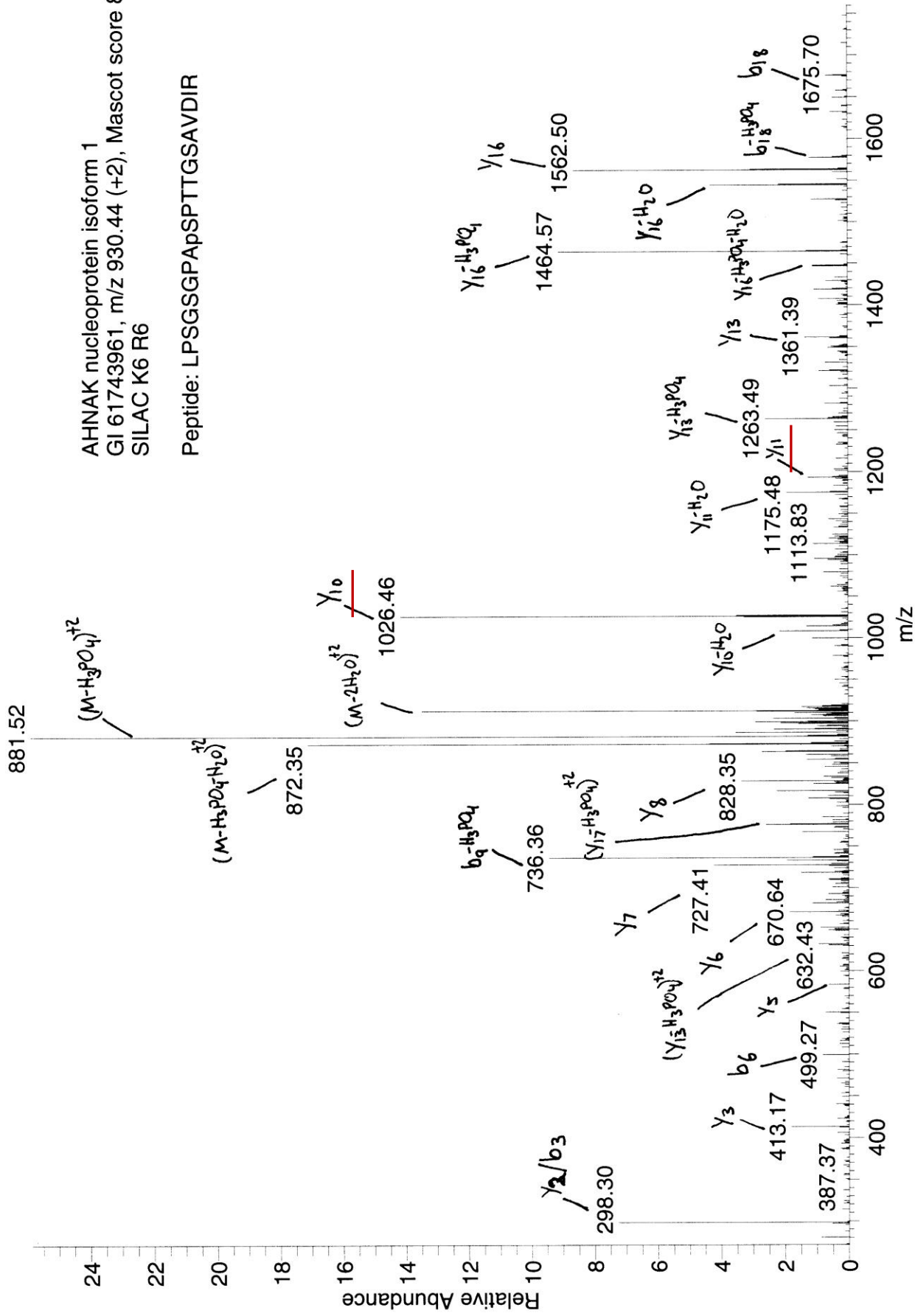


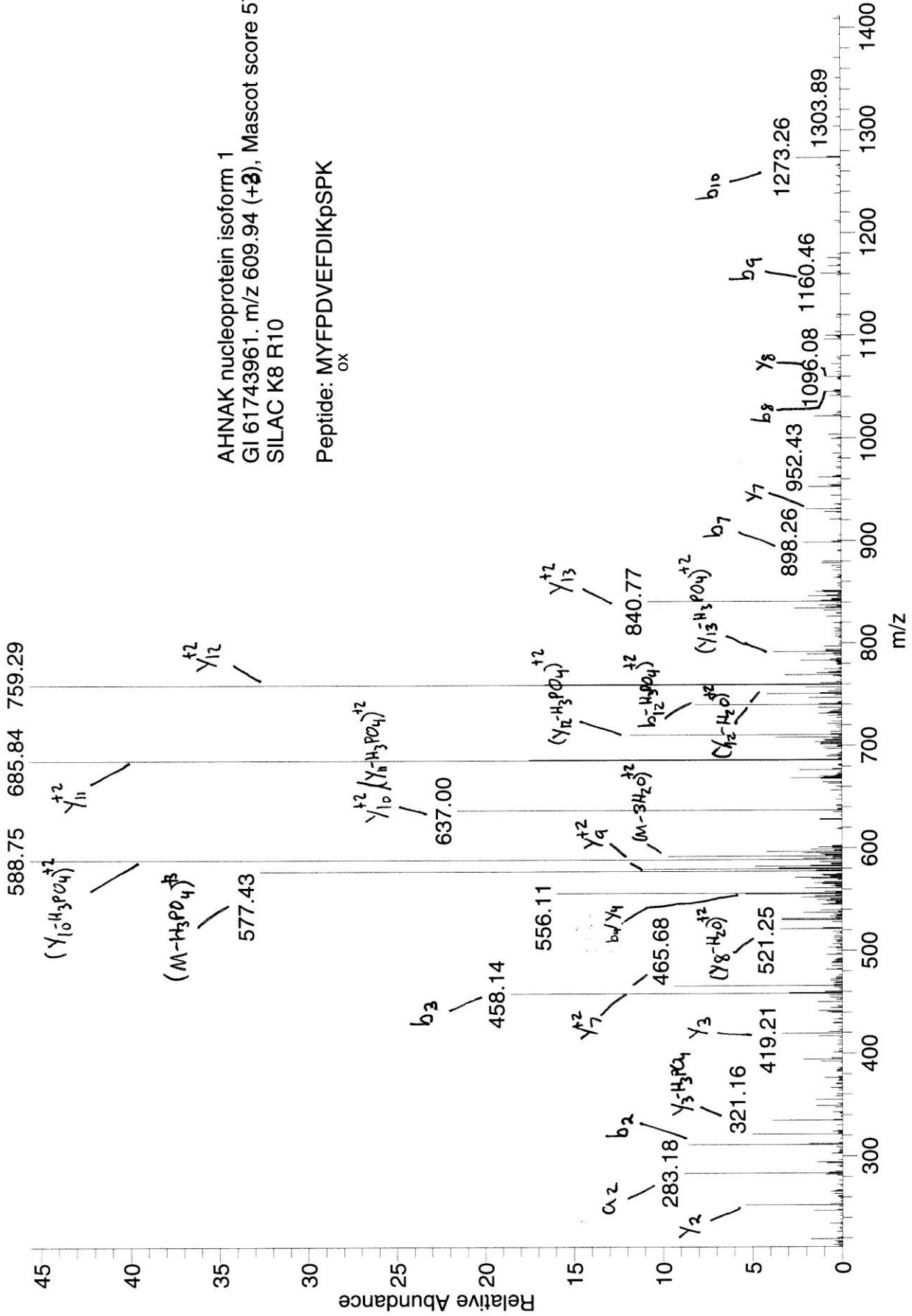
AHNAK nucleoprotein isoform 1
 GI 61743961, m/z 569.30 (+2), Mascot score 46
 SILAC K8 R10

Peptide: GPSLDIKpSPK

AHNAK nucleoprotein isoform 1
GI 61743961, m/z 930.44 (+2), Mascot score 89
SILAC K6 R6

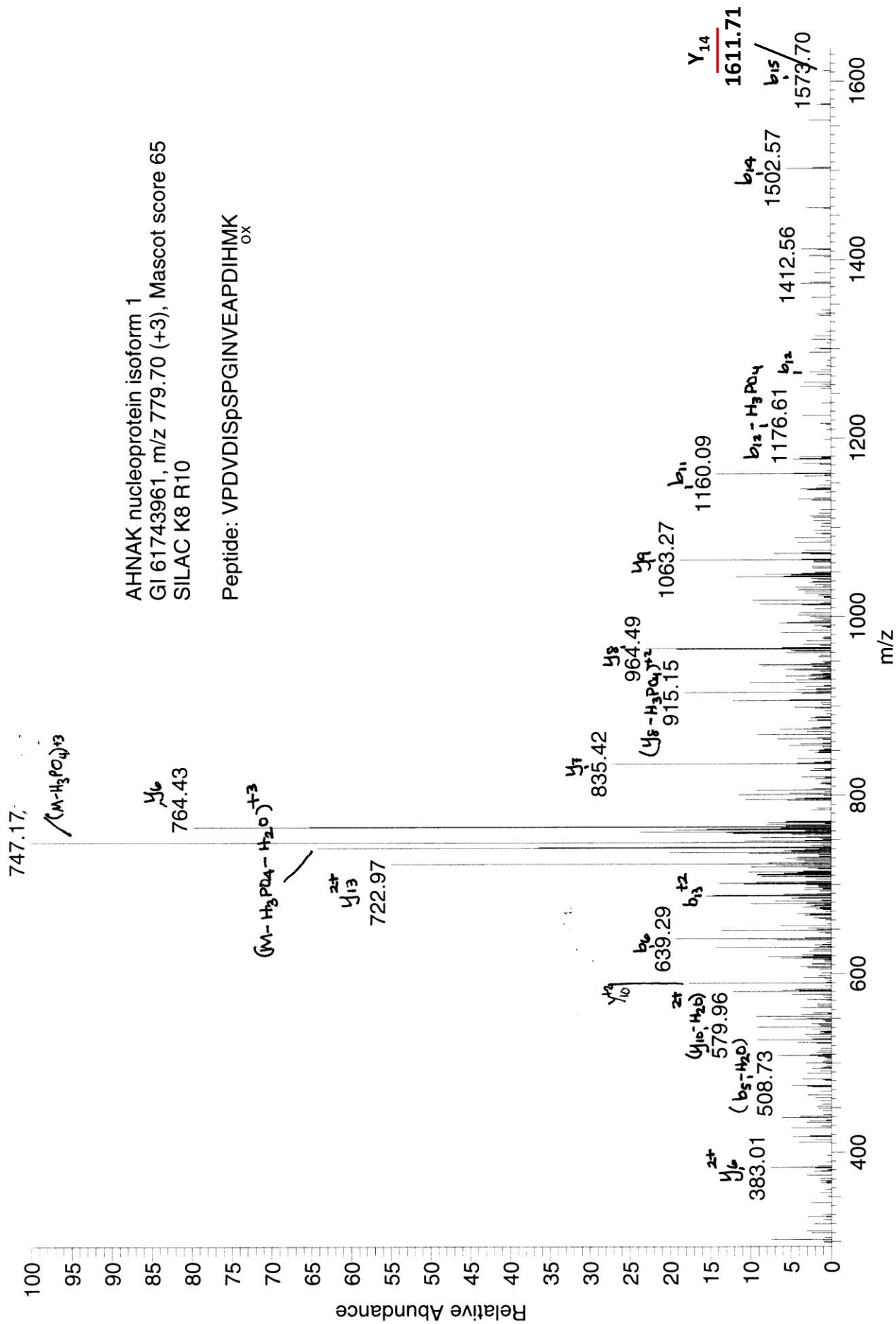
Peptide: LPSSGSPApSPTTGSVAVDIR





AHNAK nucleoprotein isoform 1
 GI 61743961. m/z 609.94 (+2), Mascot score 57
 SILAC K8 R10

Peptide: MYFPDVEFDIKpSPK_{ox}

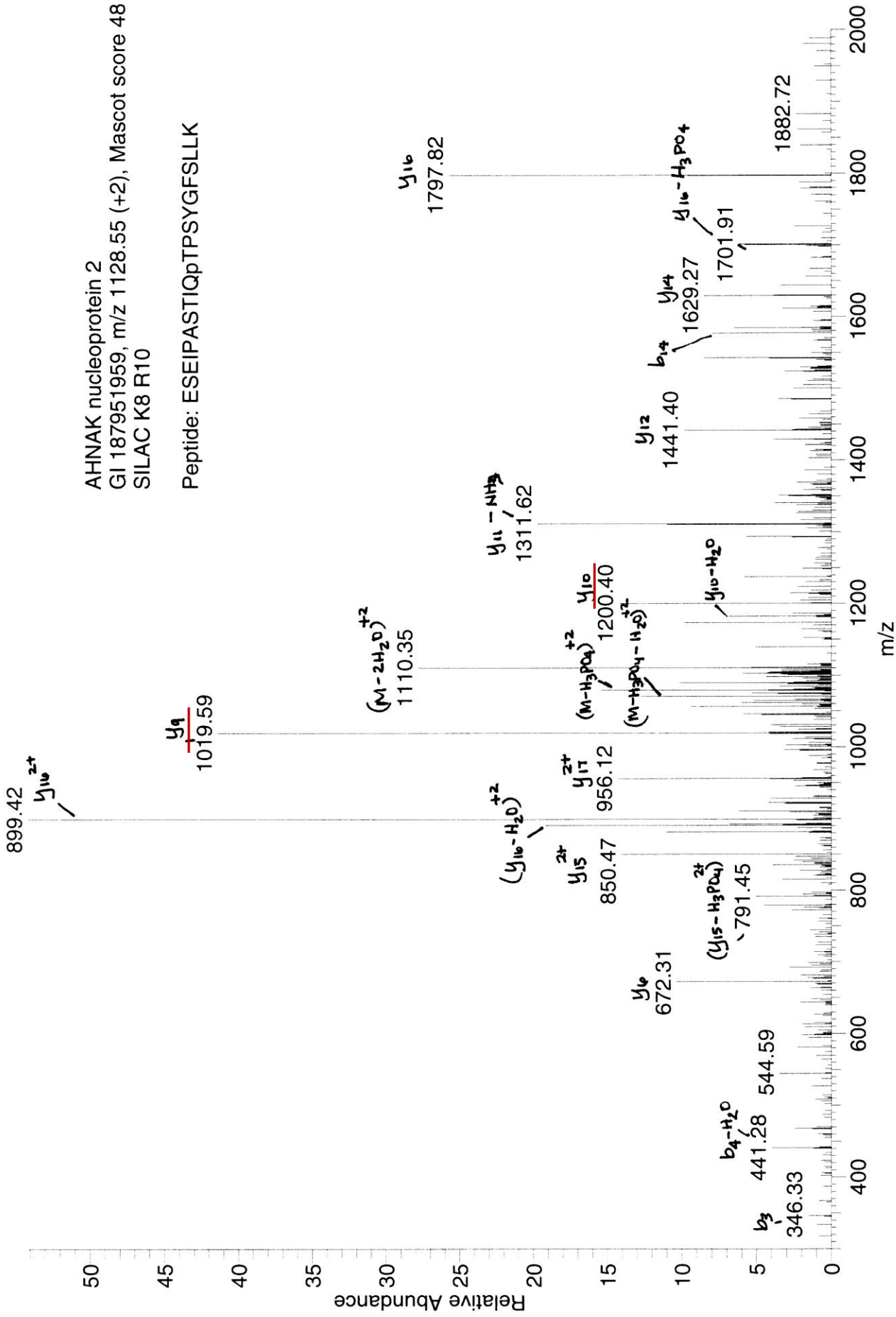


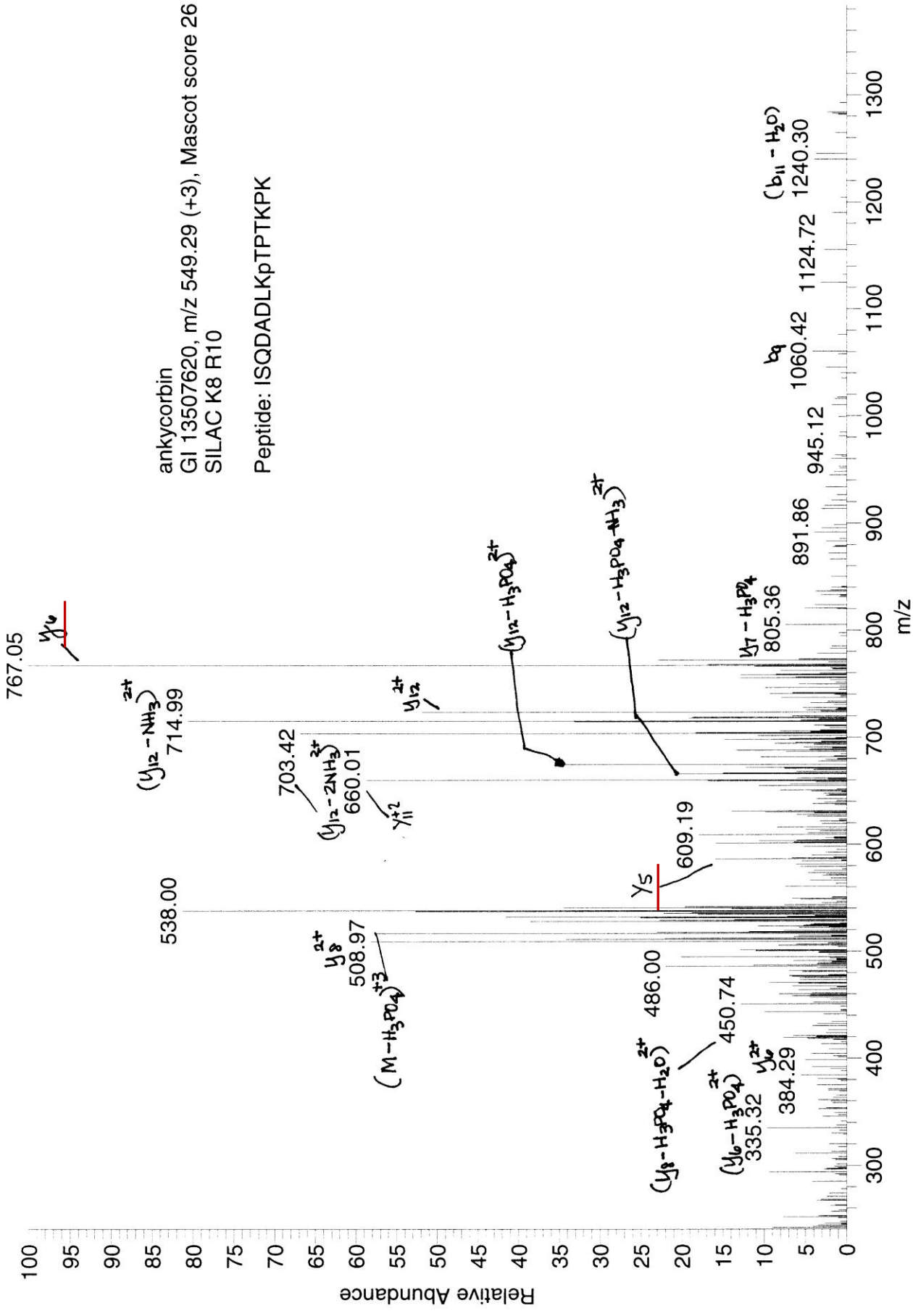
AHNAK nucleoprotein isoform 1
 GI 61743961, m/z 779.70 (+3), Mascot score 65
 SILAC K8 R10

Peptide: VPDVDISpSPGINVEAPDIHMK_{ox}

AHNAK nucleoprotein 2
 GI 187951959, m/z 1128.55 (+2), Mascot score 48
 SILAC K8 R10

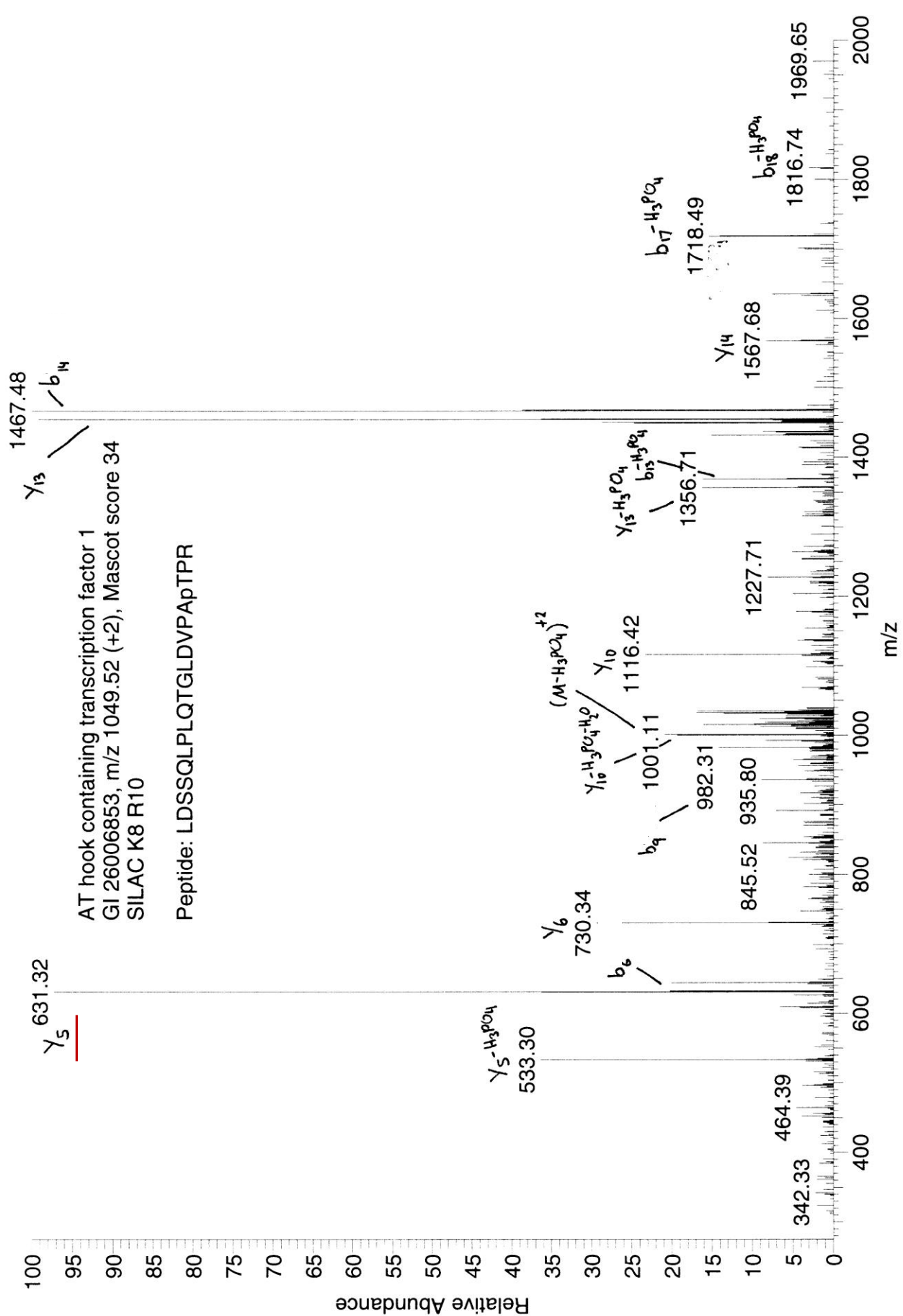
Peptide: ESEIPASTIQpTPSYGFSLLK

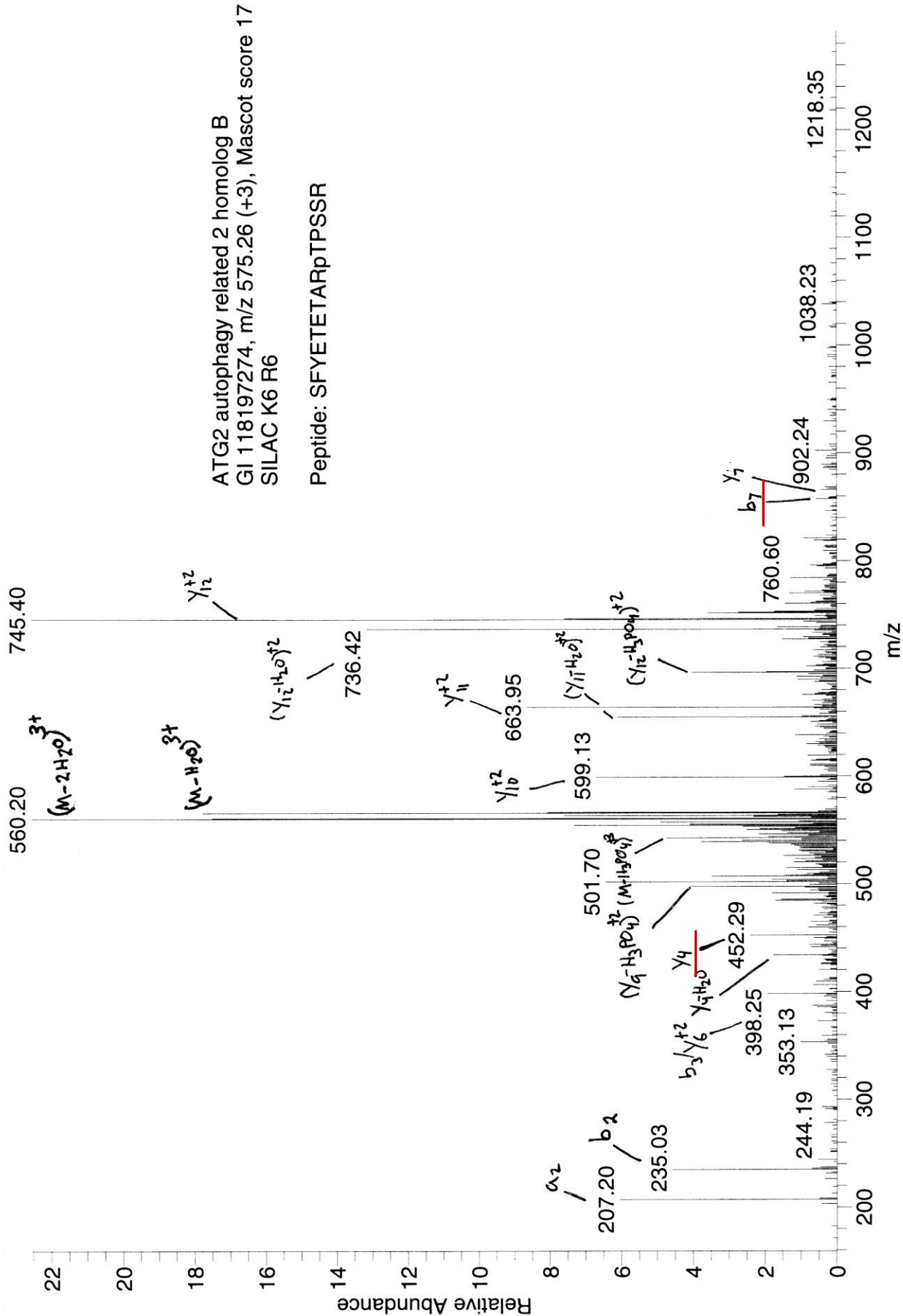




ankycorbin
 GI 13507620, m/z 549.29 (+3), Mascot score 26
 SILAC K8 R10

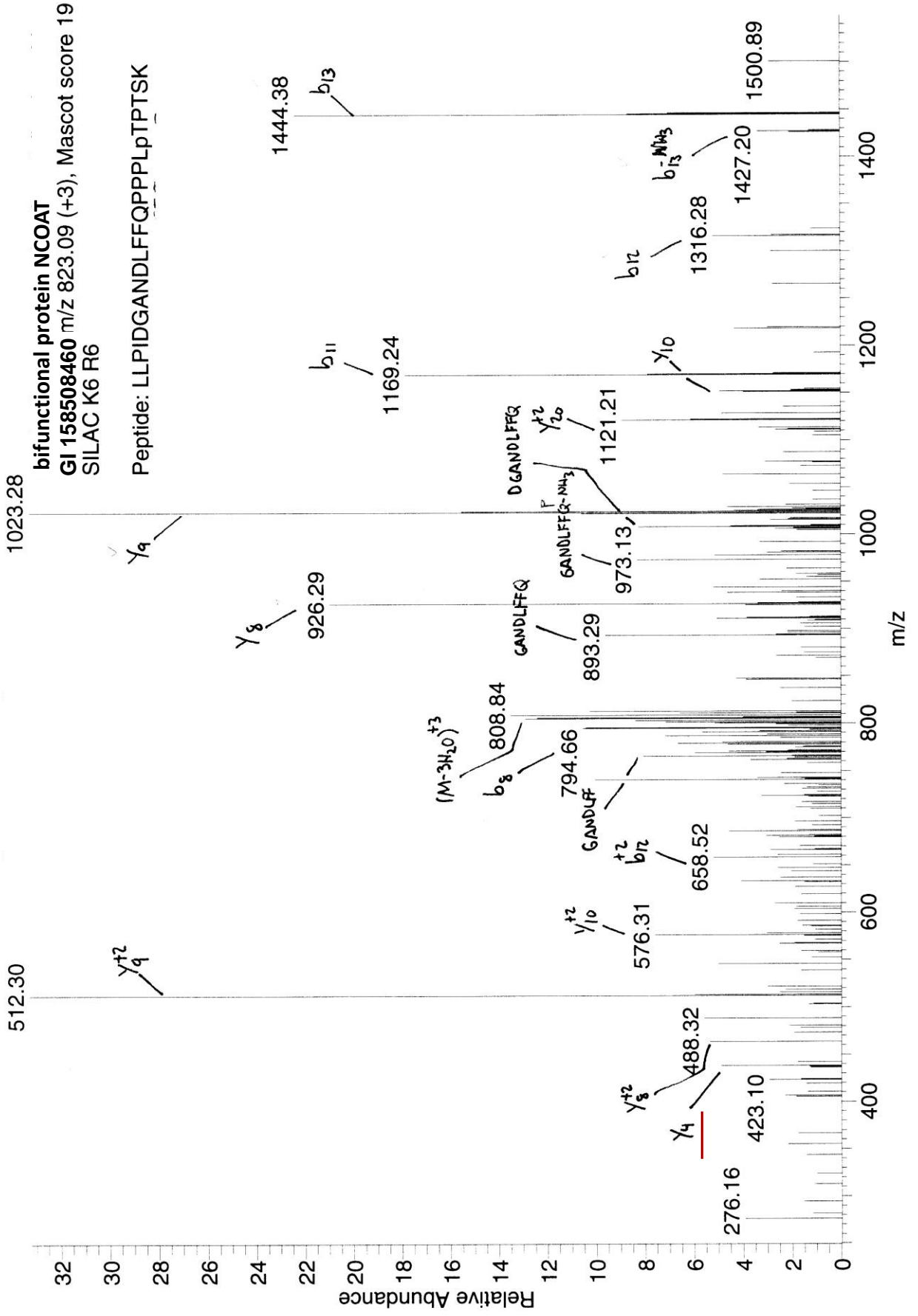
Peptide: ISQDADLKpTPTKPK

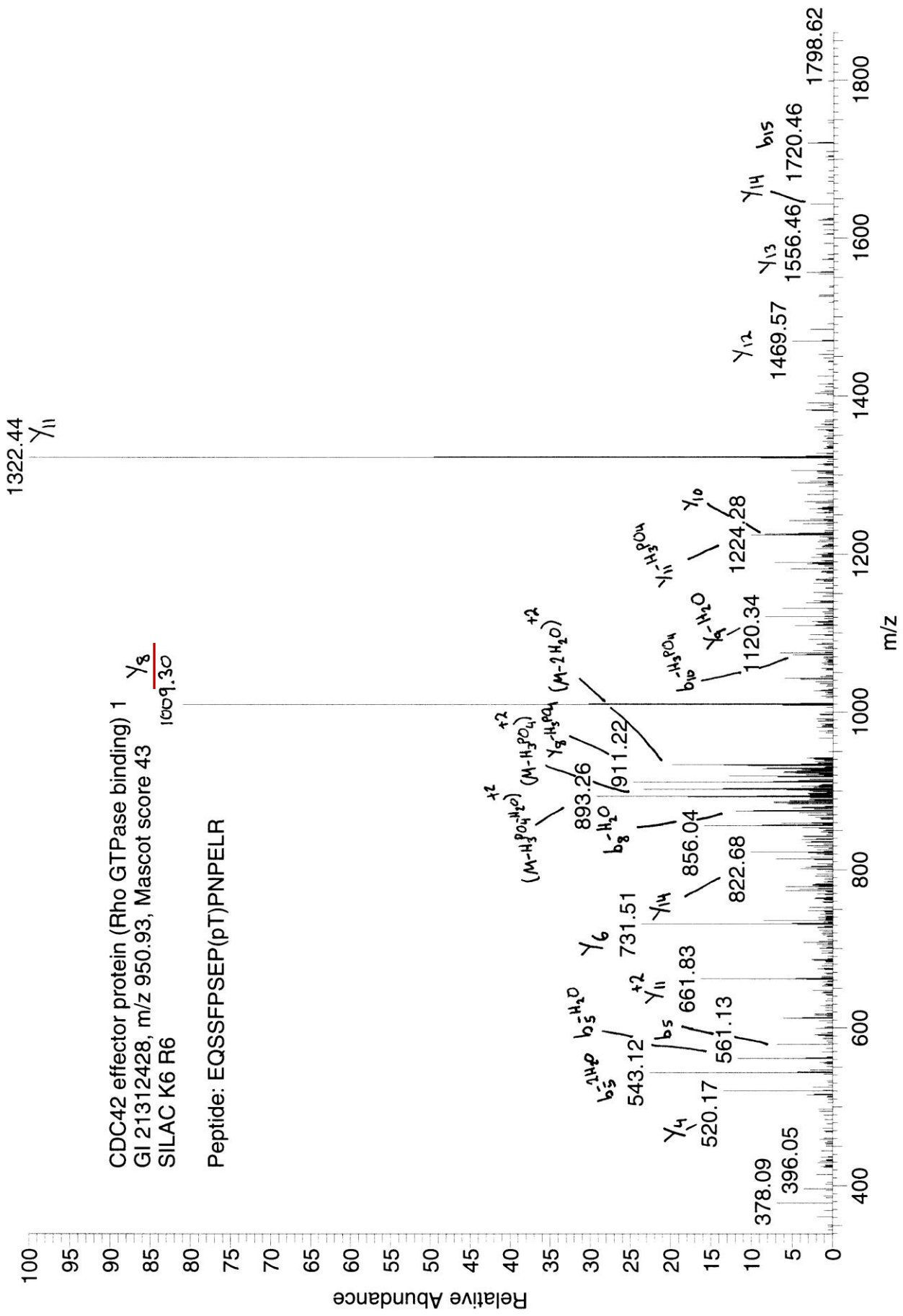




ATG2 autophagy related 2 homolog B
 GI 118197274, m/z 575.26 (+3), Mascot score 17
 SILAC K6 R6

Peptide: SFYETETARpTPSSR

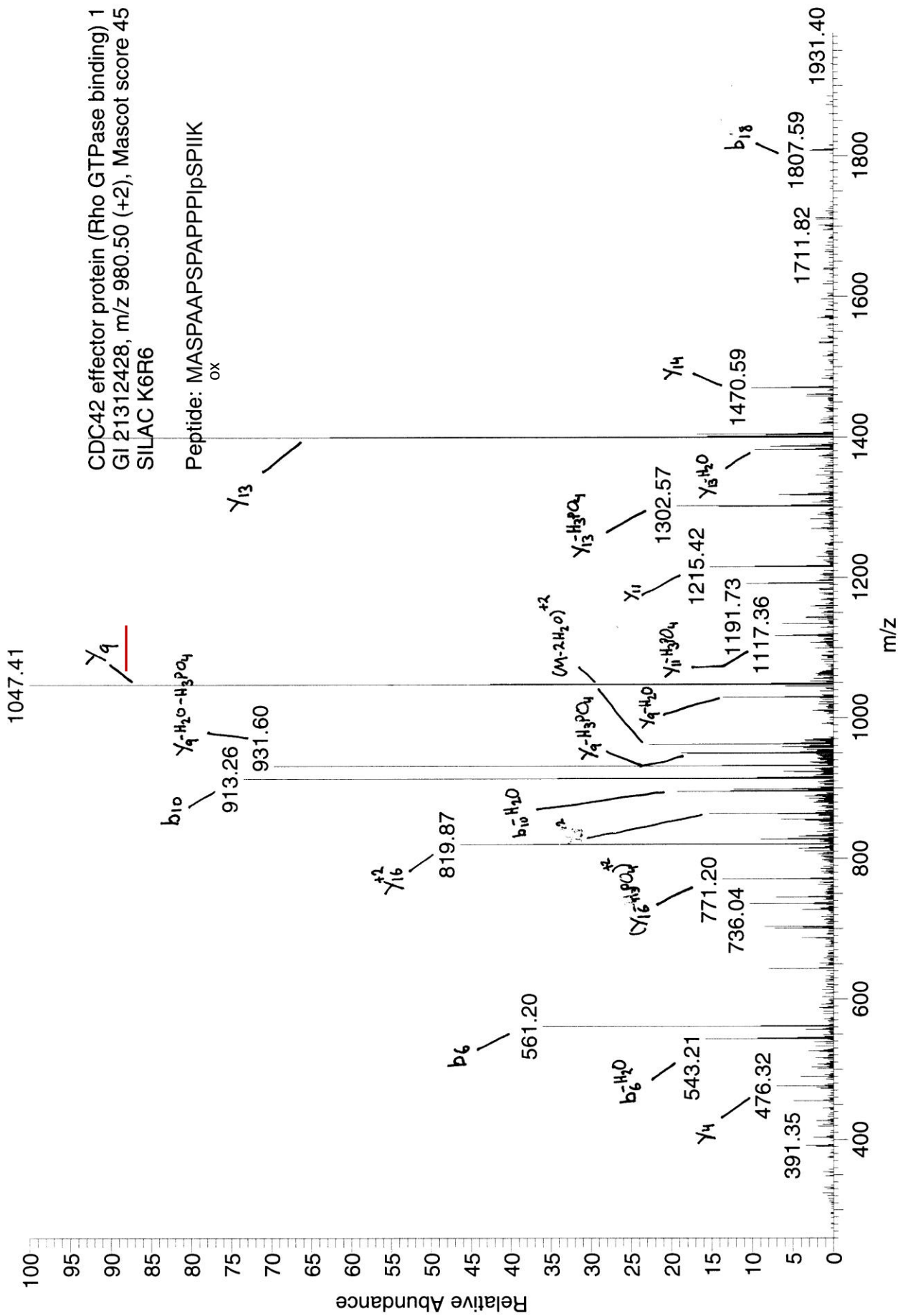




CDC42 effector protein (Rho GTPase binding) 1
 GI 21312428, m/z 950.93, Mascot score 43
 SILAC K6 R6

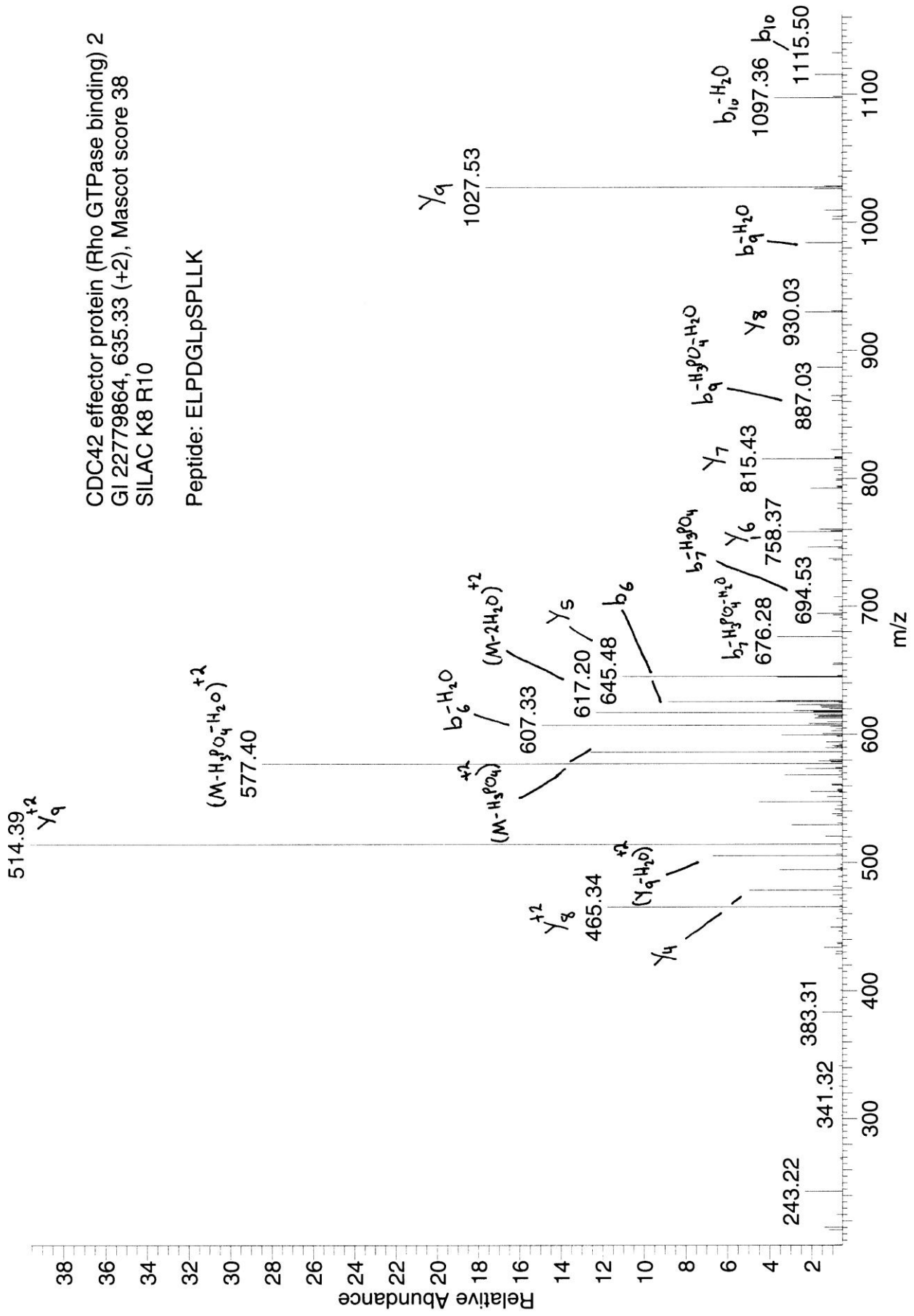
Peptide: EQSSFPEP(pT)PNPELR

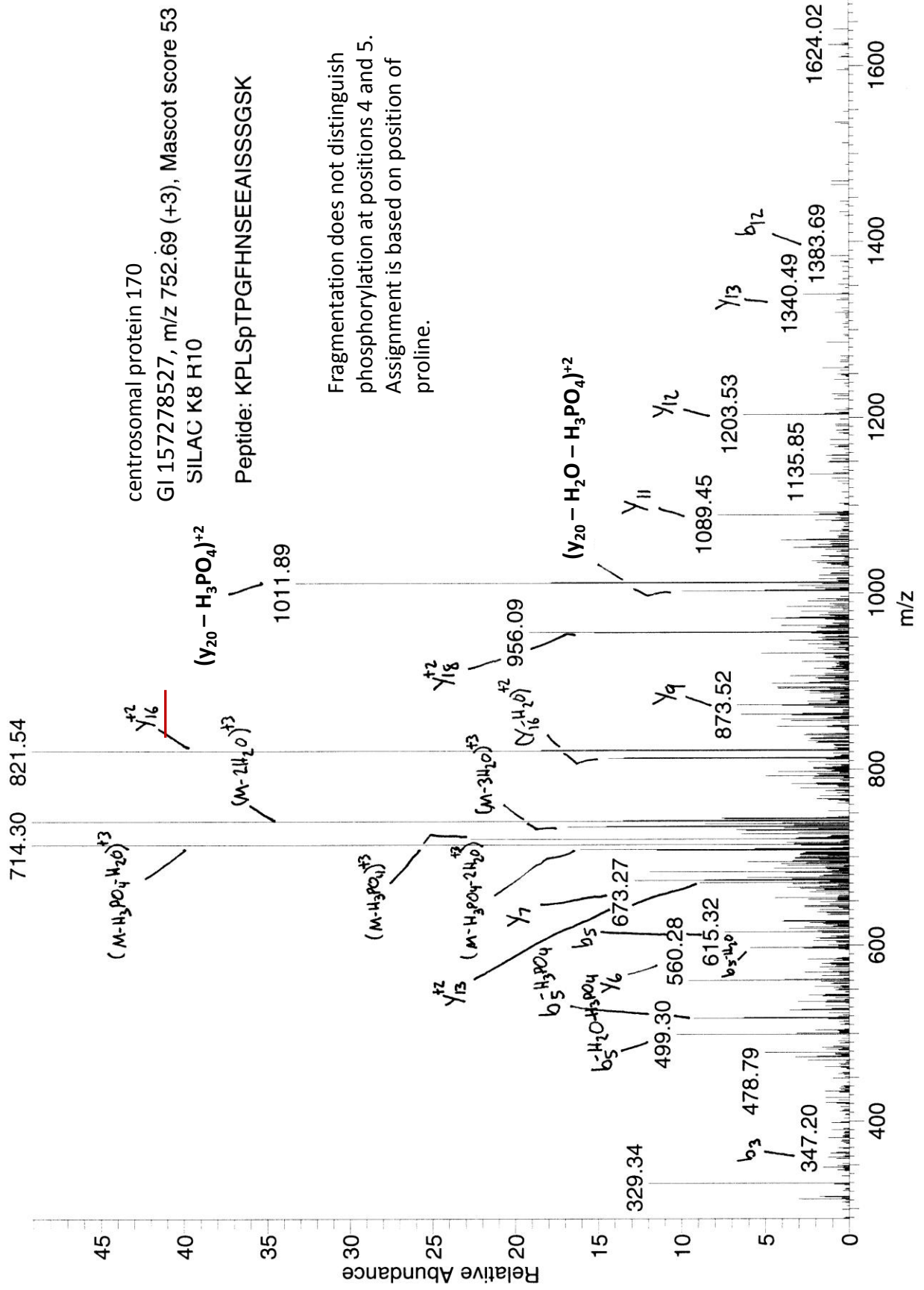
γ_8
 1009.30



CDC42 effector protein (Rho GTPase binding) 2
 GI 22779864, 635.33 (+2), Mascot score 38
 SILAC K8 R10

Peptide: ELPDGLpSPLLK





centrosomal protein 170

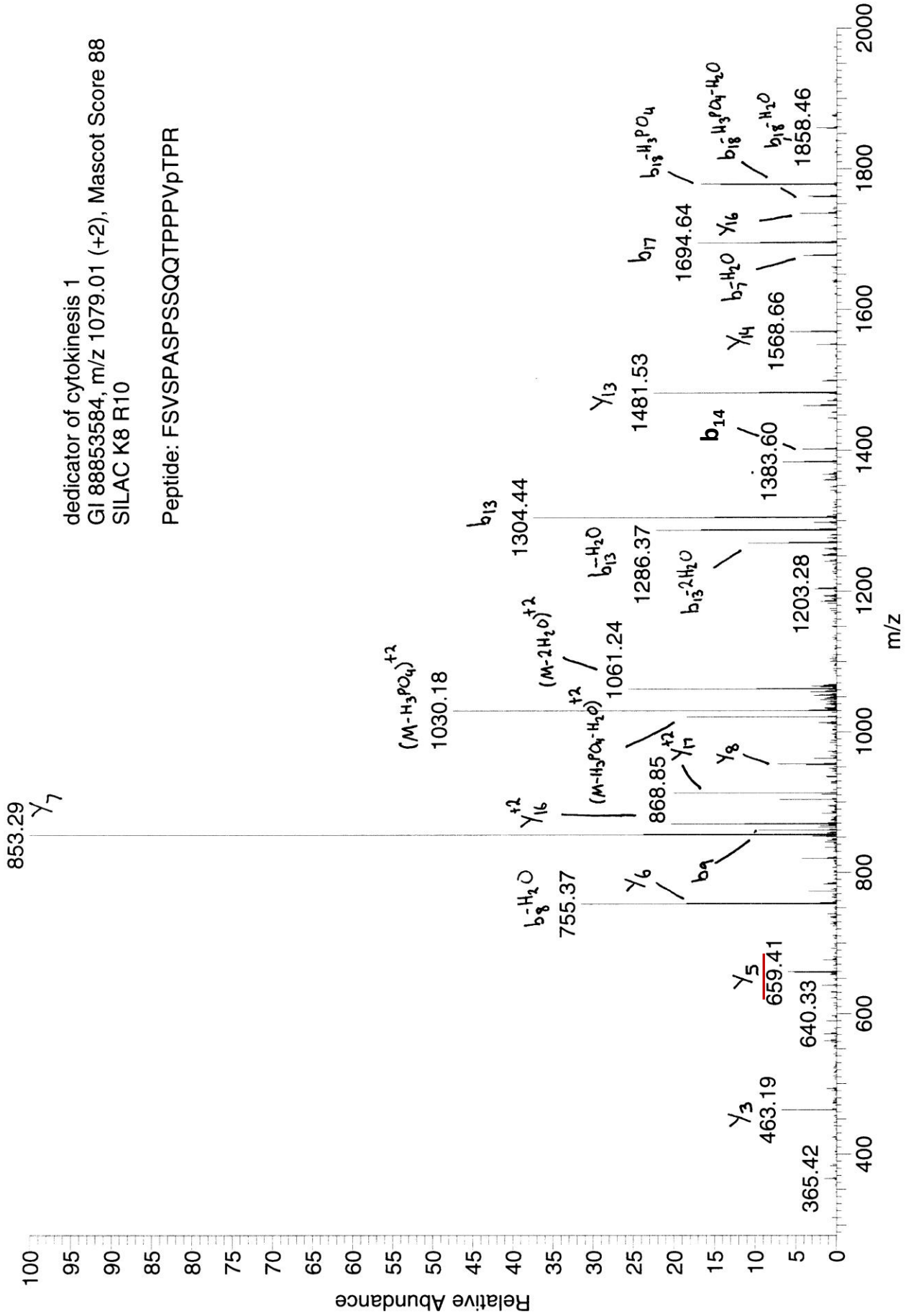
GI 157278527, m/z 752.69 (+3), Mascot score 53
SILAC K8 R10

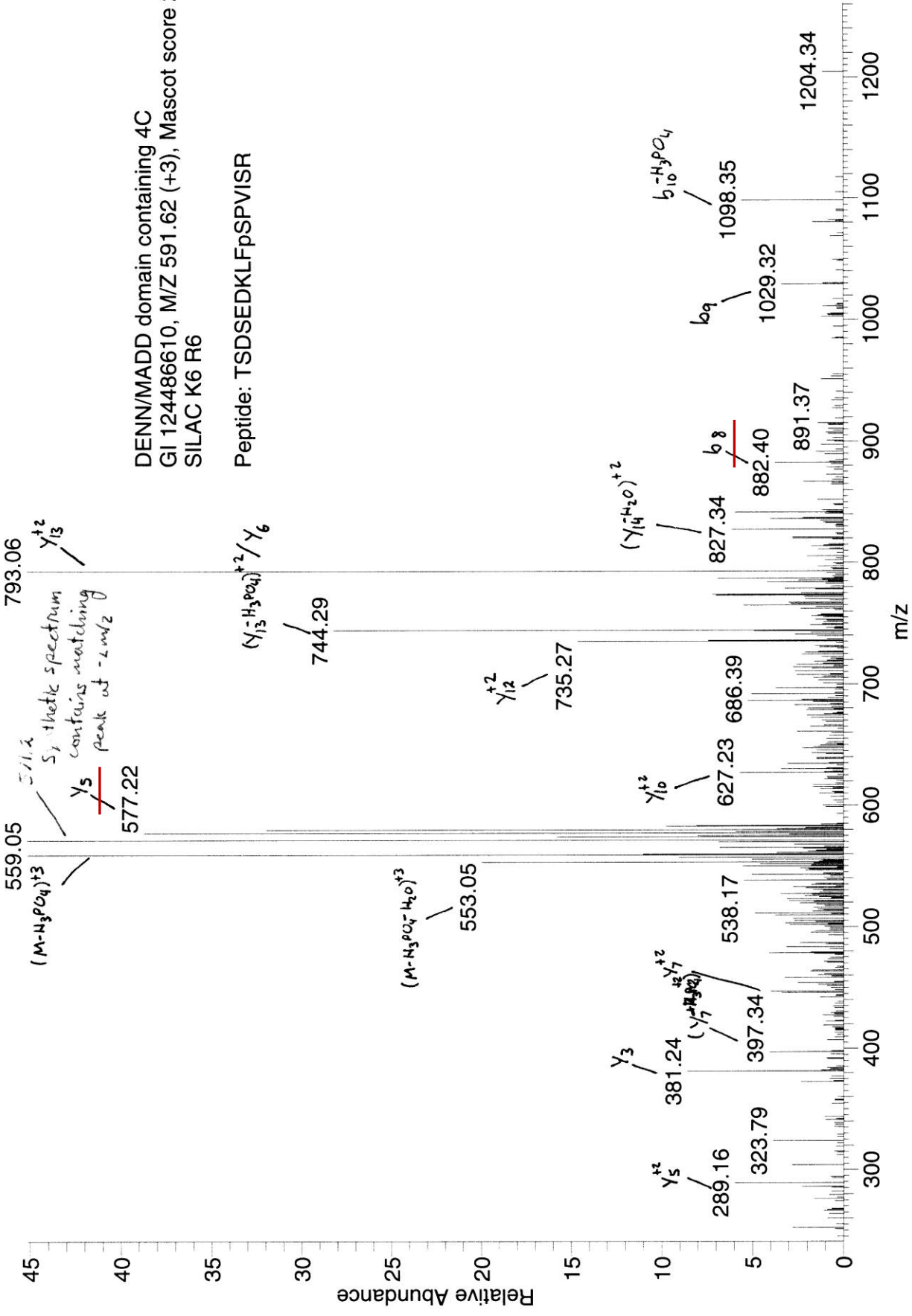
Peptide: KPLSpTPGFHNSEEAISSGSK

Fragmentation does not distinguish phosphorylation at positions 4 and 5. Assignment is based on position of proline.

dedicator of cytokinesis 1
GI 88853584, m/z 1079.01 (+2), Mascot Score 88
SILAC K8 R10

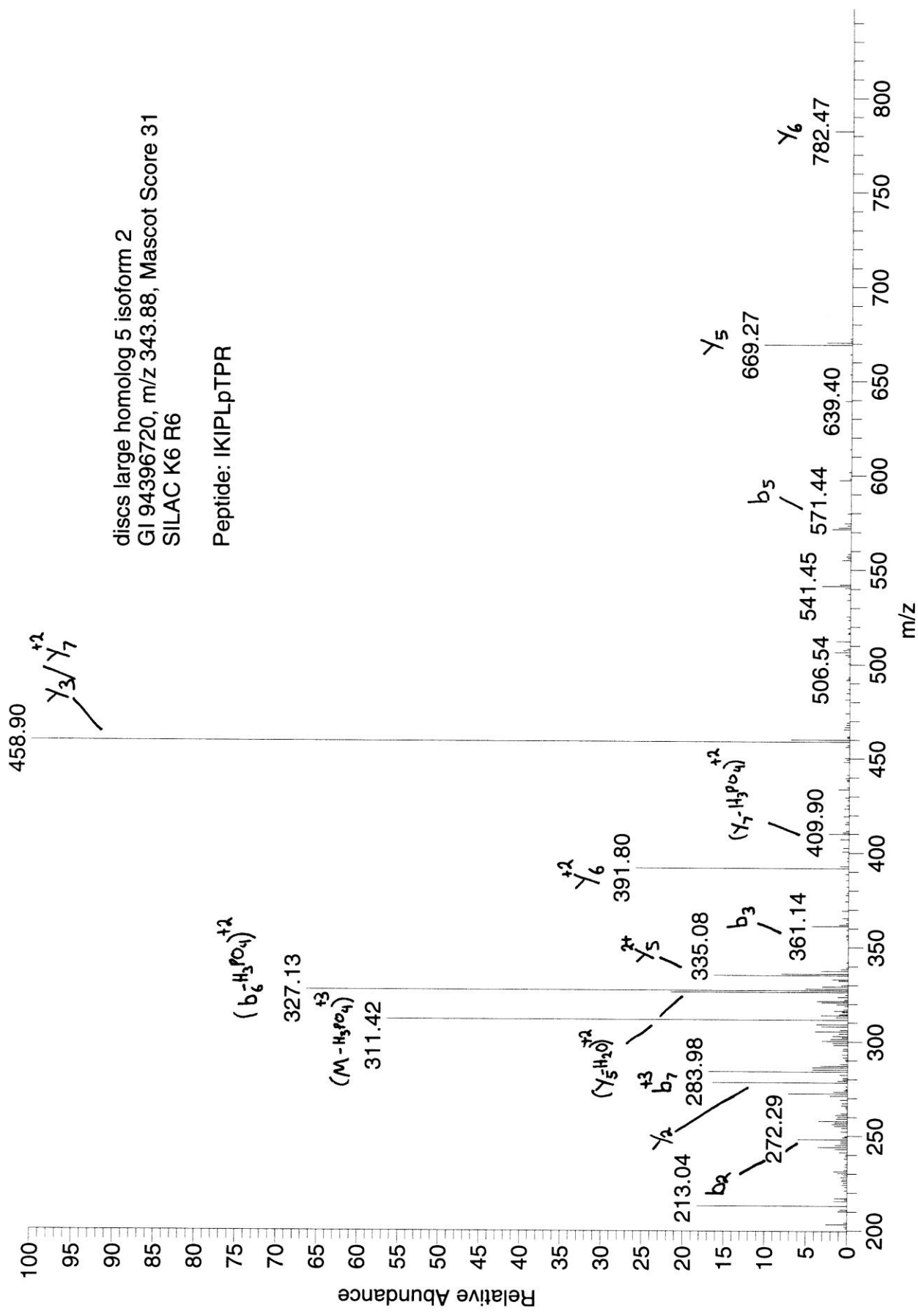
Peptide: FSVSPASPSSQQTPPPVpTPR





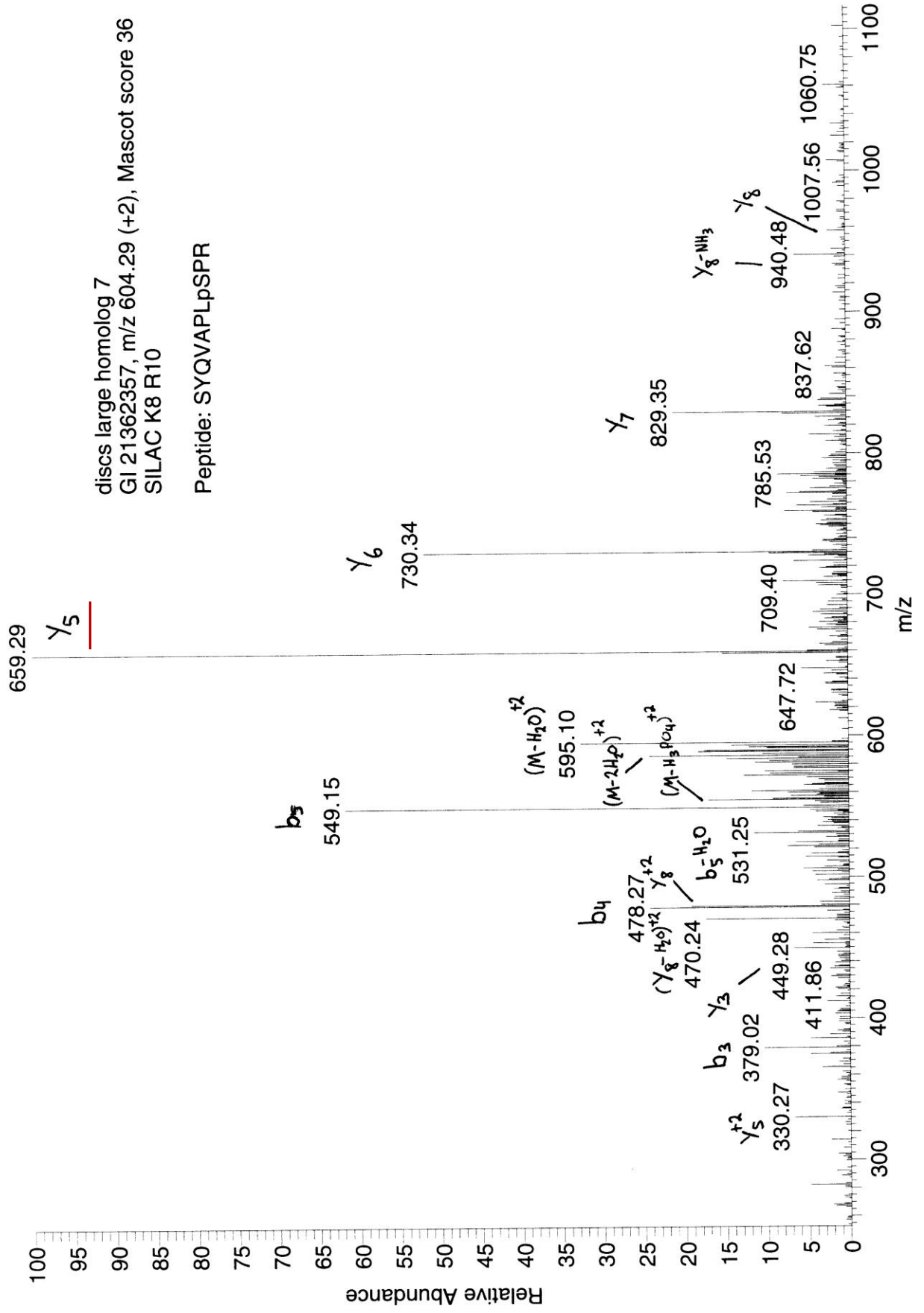
DENN/MADD domain containing 4C
 GI 124486610, M/Z 591.62 (+3), Mascot score 26
 SILAC K6 R6

Peptide: TSDSEDKLFPSPVISR

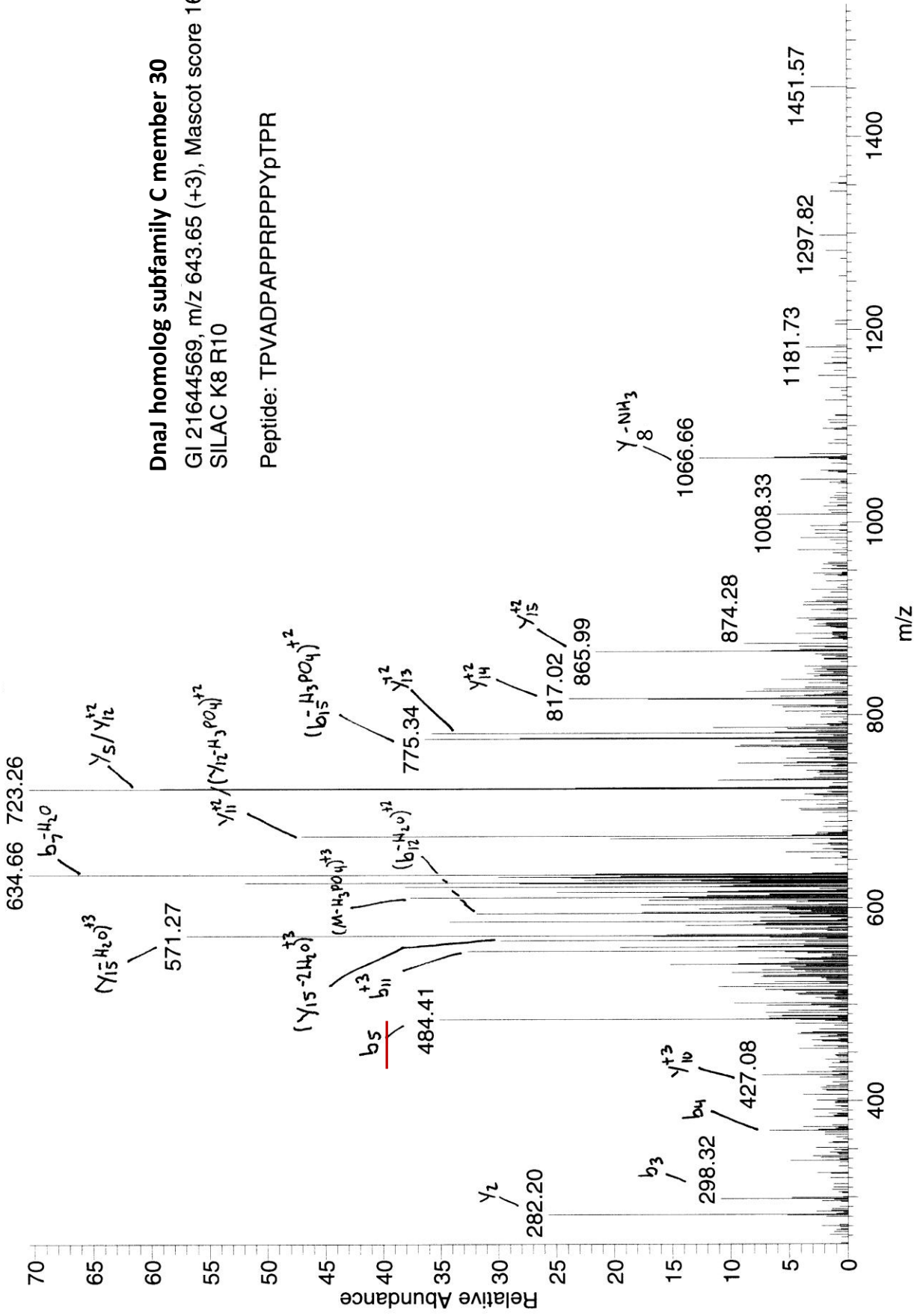


discs large homolog 5 isoform 2
 GI 94396720, m/z 343.88, Mascot Score 31
 SILAC K6 R6

Peptide: IKIPLpTPR



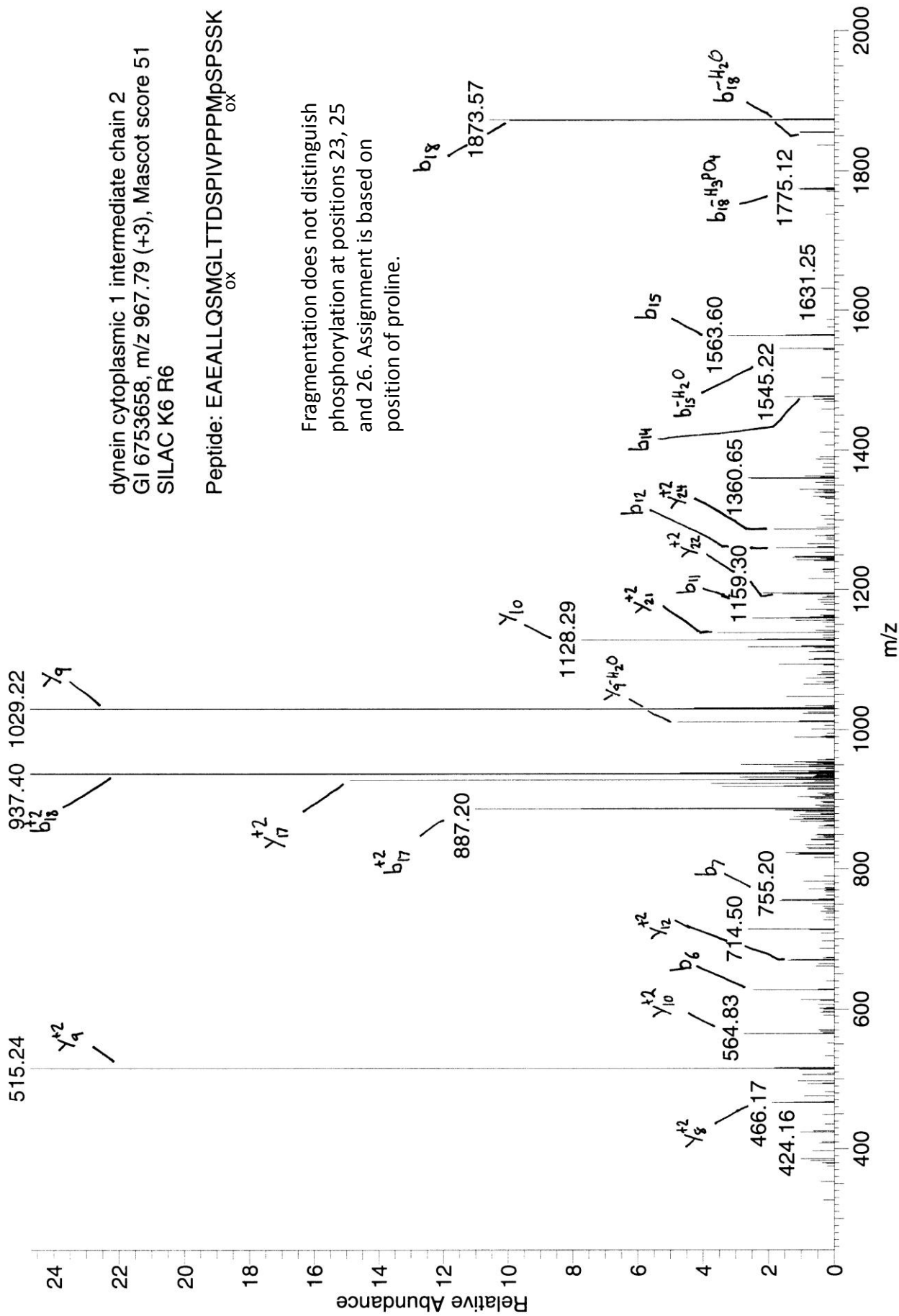
Dnaj homolog subfamily C member 30
 GI 21644569, m/z 643.65 (+3), Mascot score 16
 SILAC K8 R10
 Peptide: TPVADPAPRRPPPYpTPR

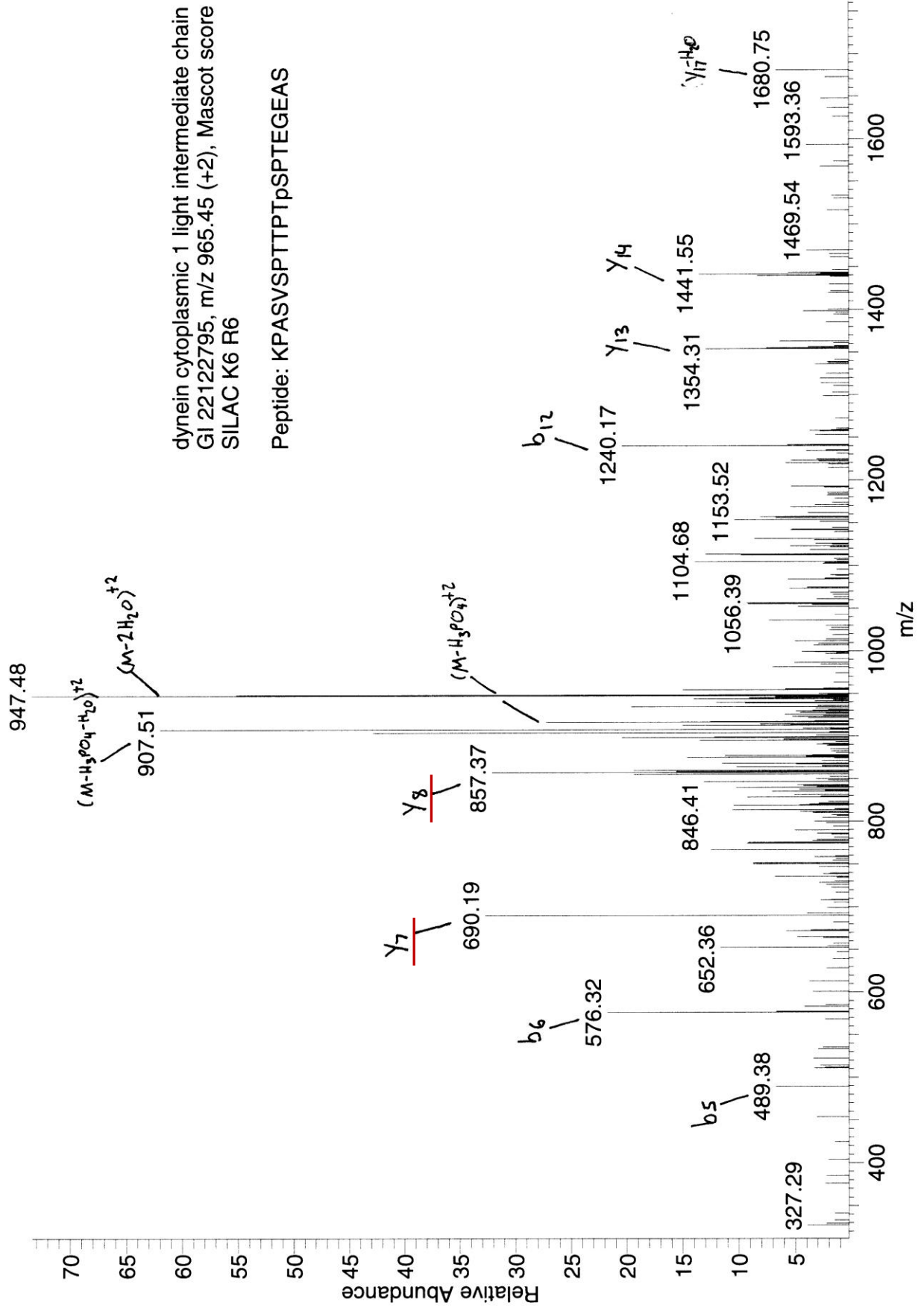


dynein cytoplasmic 1 intermediate chain 2
 GI 6753658, m/z 967.79 (+3), Mascot score 51
 SILAC K6 R6

Peptide: EAEALLQSMGLTTDSPVIPPMPSPSSK_{ox}

Fragmentation does not distinguish phosphorylation at positions 23, 25 and 26. Assignment is based on position of proline.



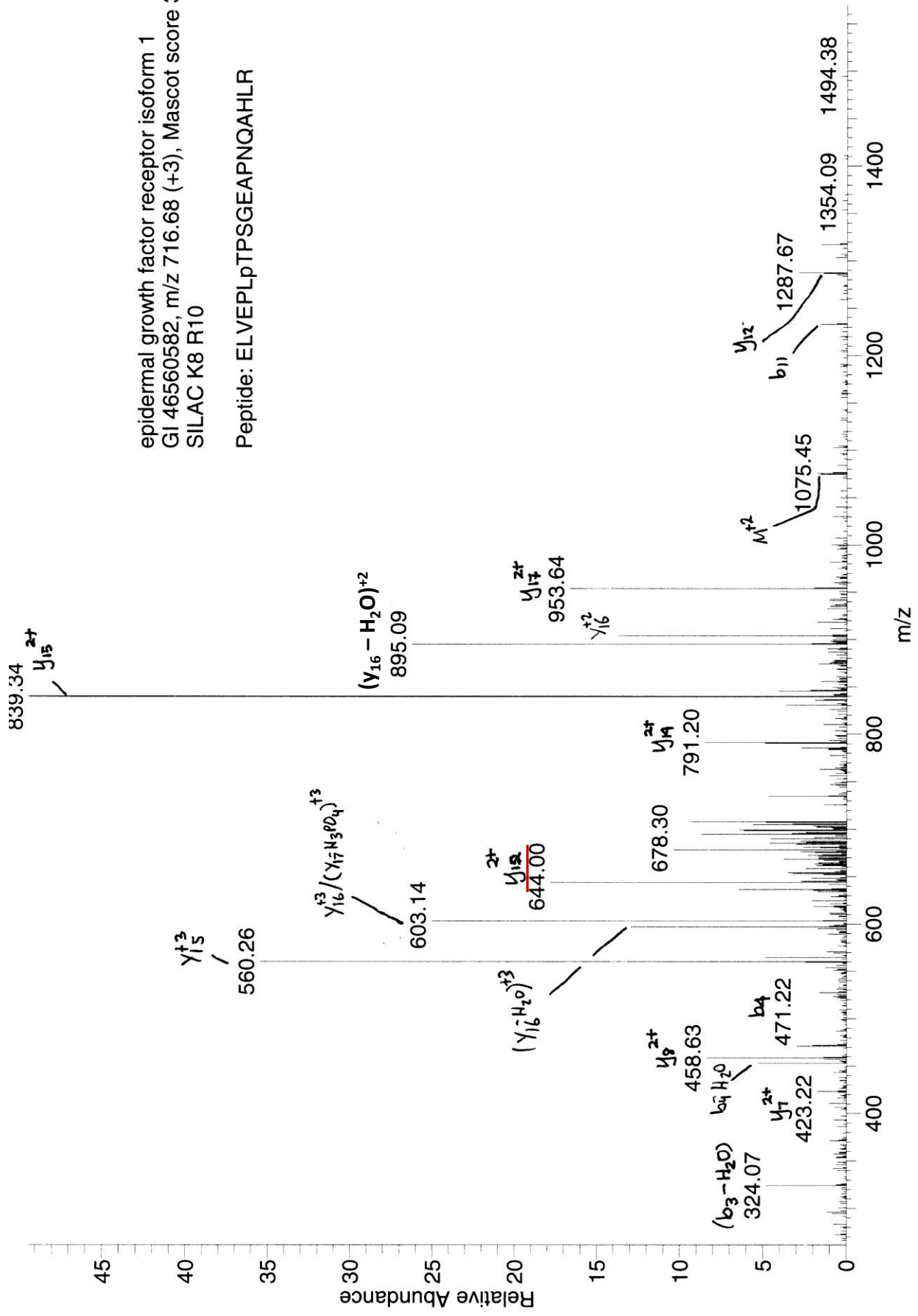


dynein cytoplasmic 1 light intermediate chain 1
 GI 22122795, m/z 965.45 (+2), Mascot score 27
 SILAC K6 R6

Peptide: KPASVSPTTTTPSPTEGEAS

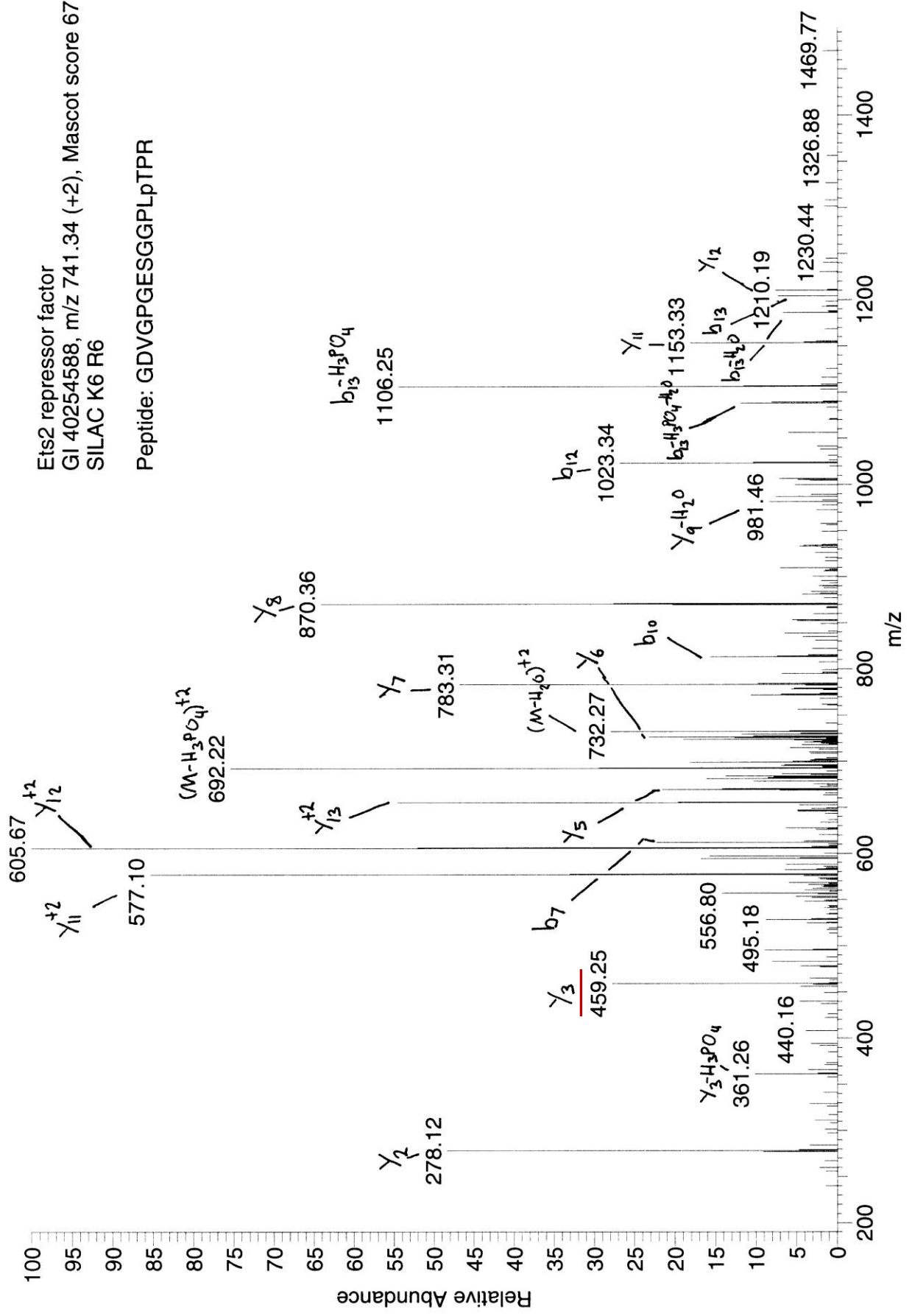
epidermal growth factor receptor isoform 1
 GI 46560582, m/z 716.68 (+3), Mascot score 34
 SILAC K8 R10

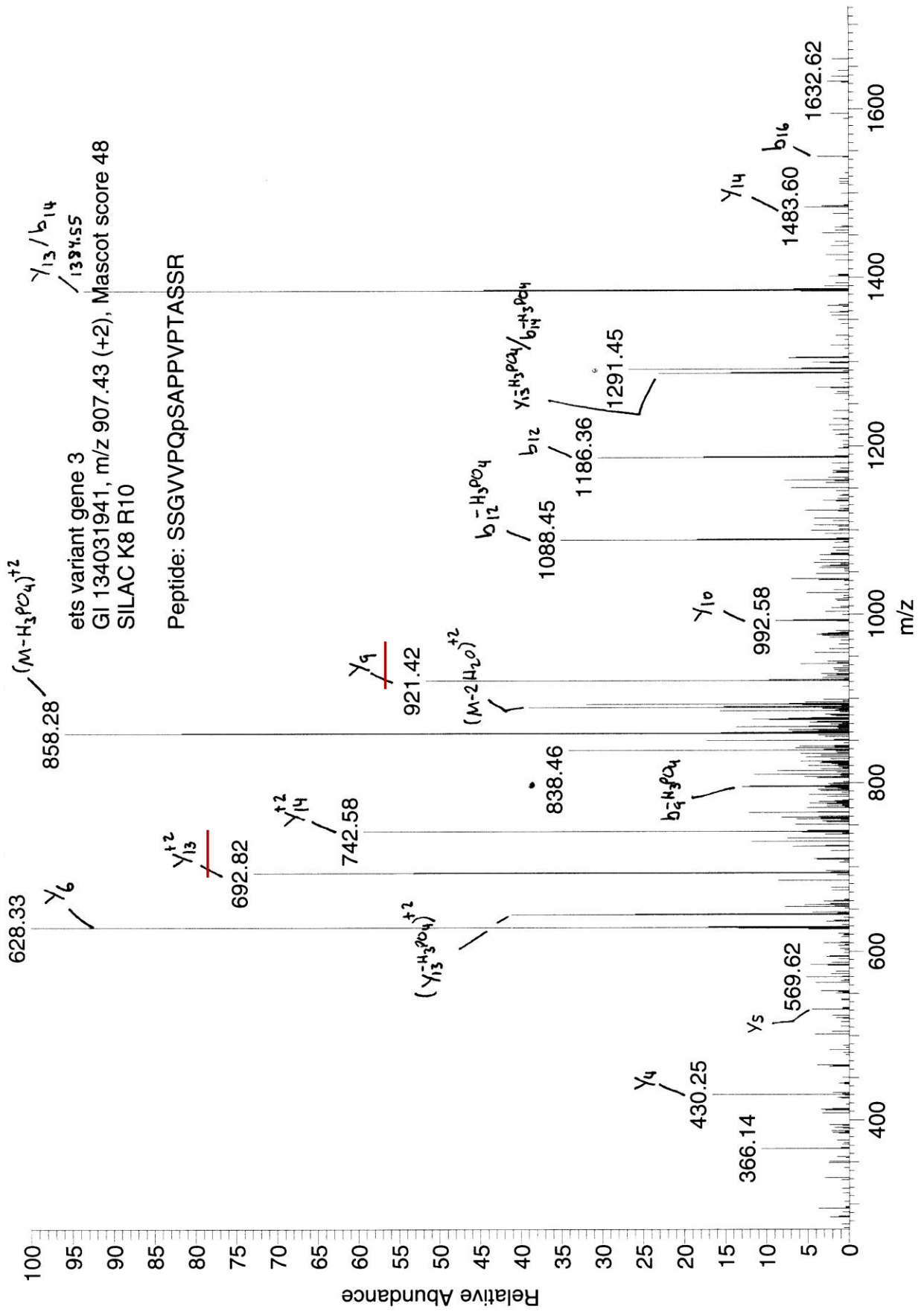
Peptide: ELVEPLpTPSGEAPNQAHLR

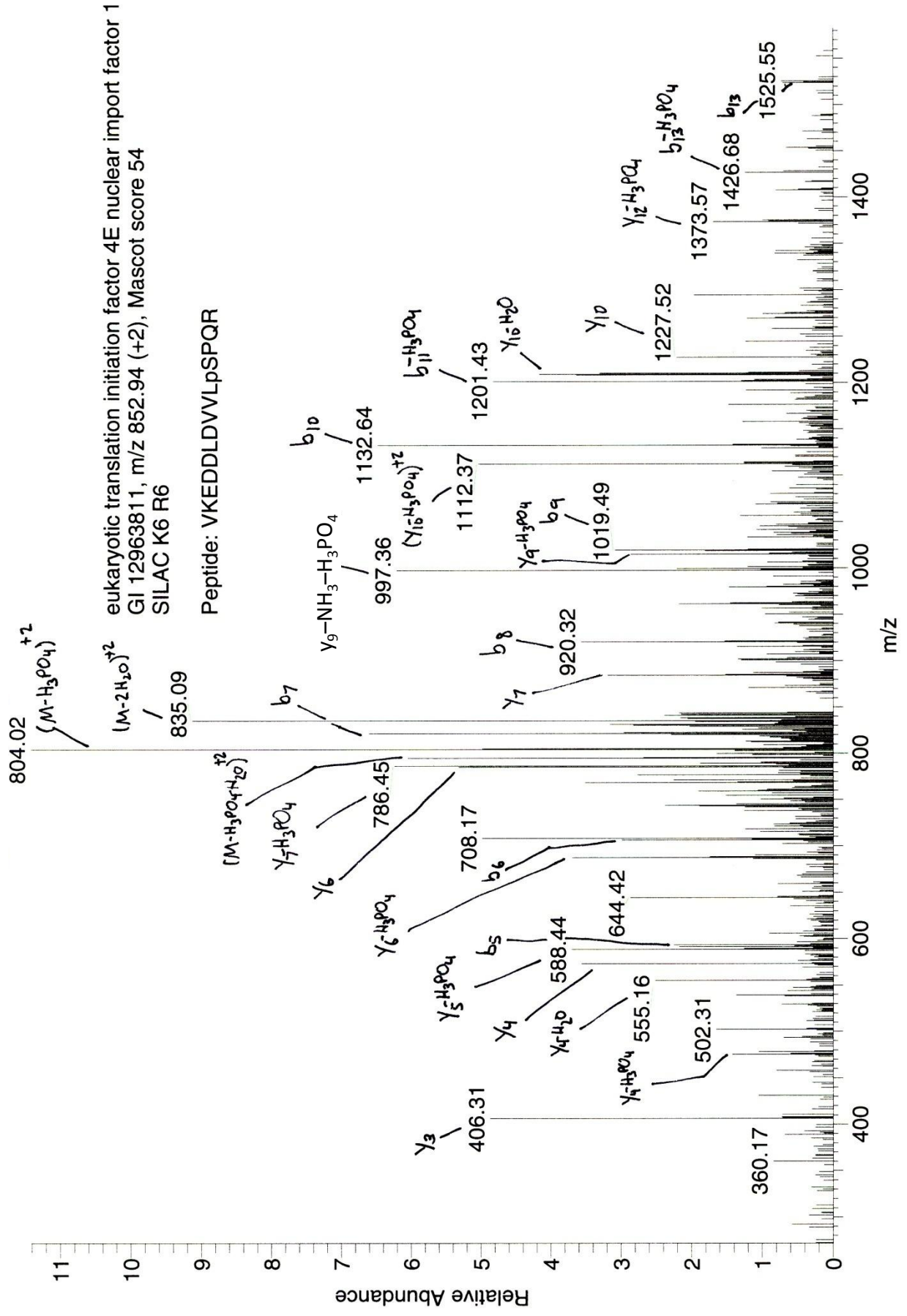


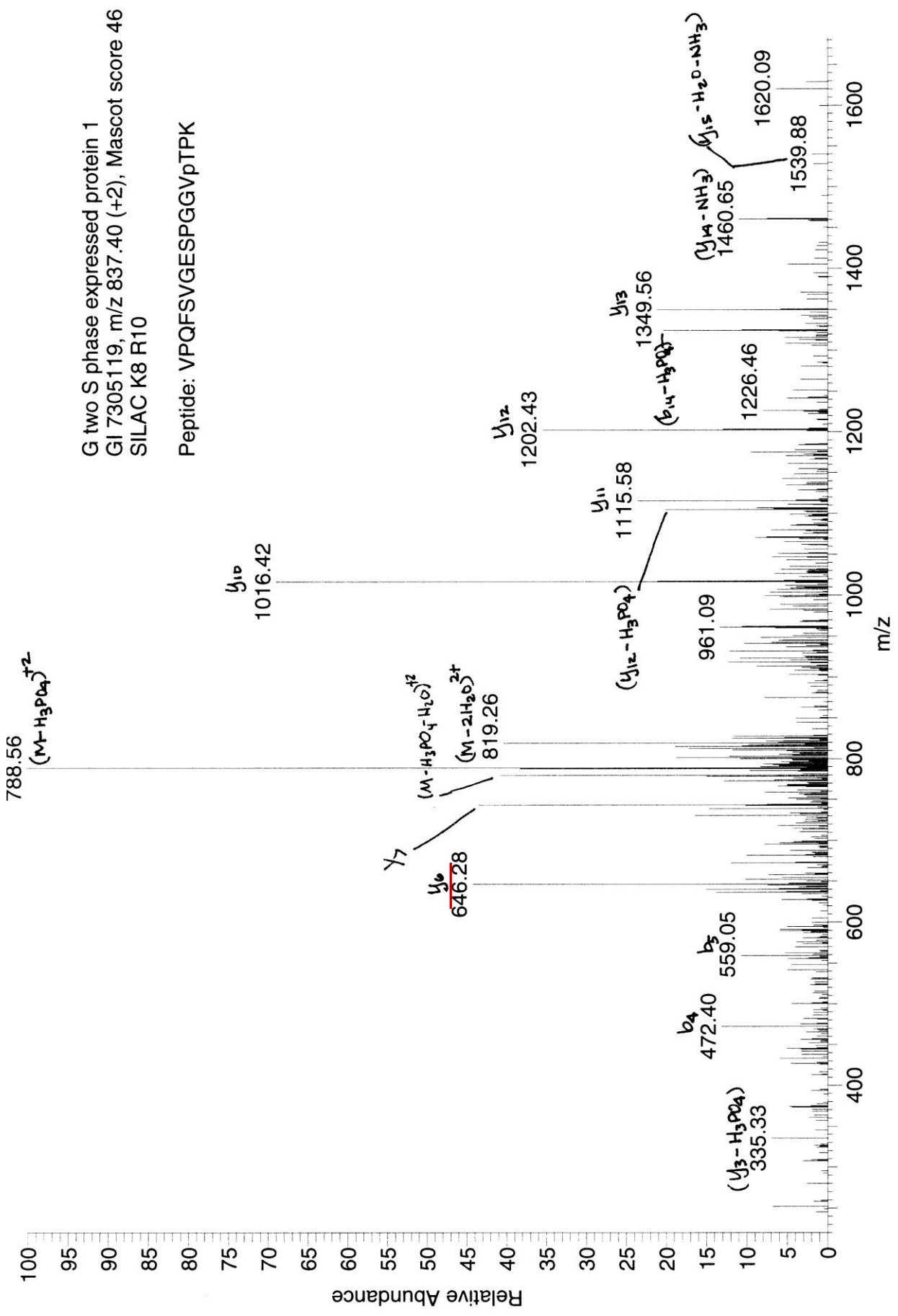
Ets2 repressor factor
 GI 40254588, m/z 741.34 (+2), Mascot score 67
 SILAC K6 R6

Peptide: GDVGPGESGGPLpTPR







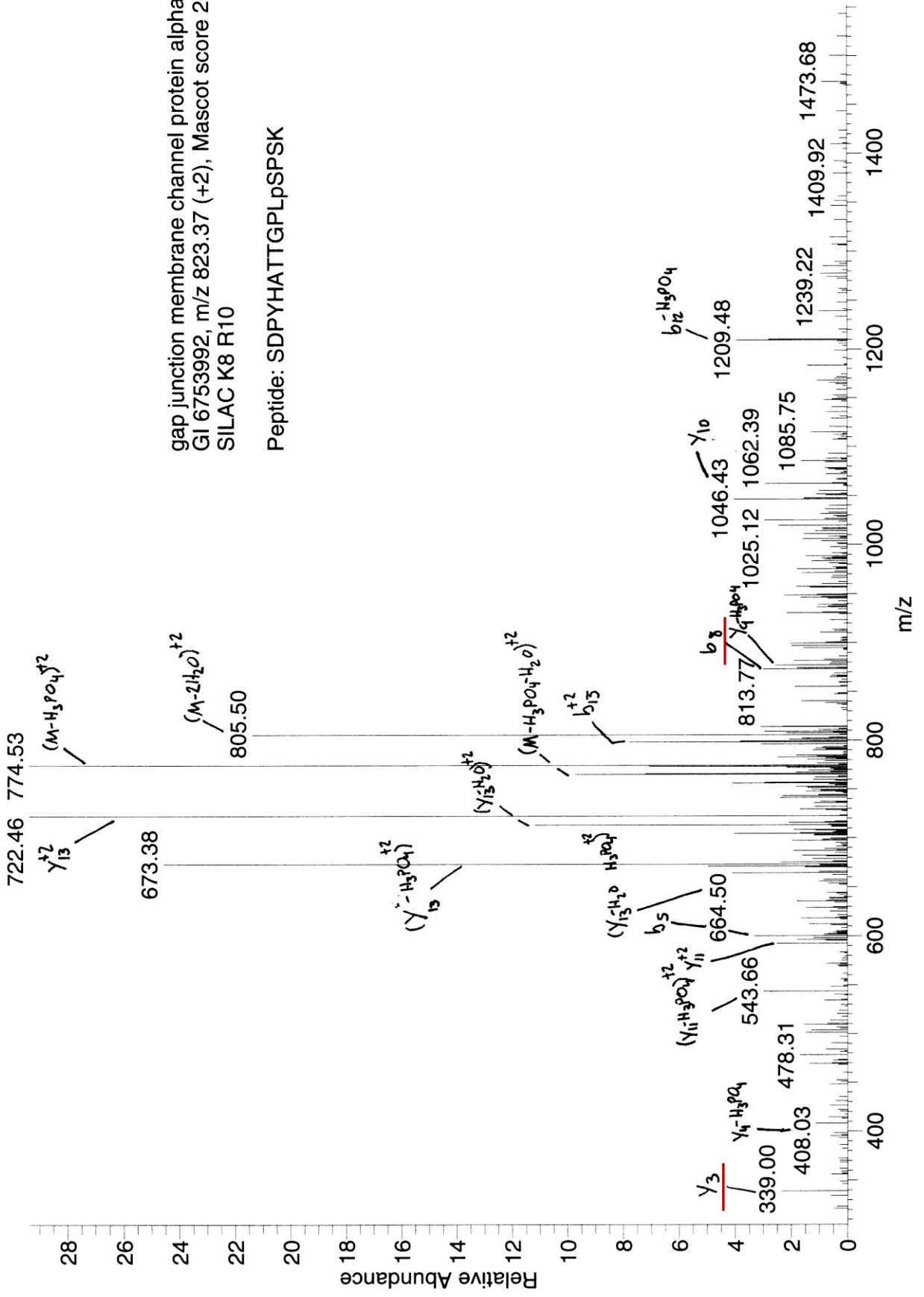


G two S phase expressed protein 1
 GI 7305119, m/z 837.40 (+2), Mascot score 46
 SILAC K8 R10

Peptide: VPQFVSGESGGVpTPK

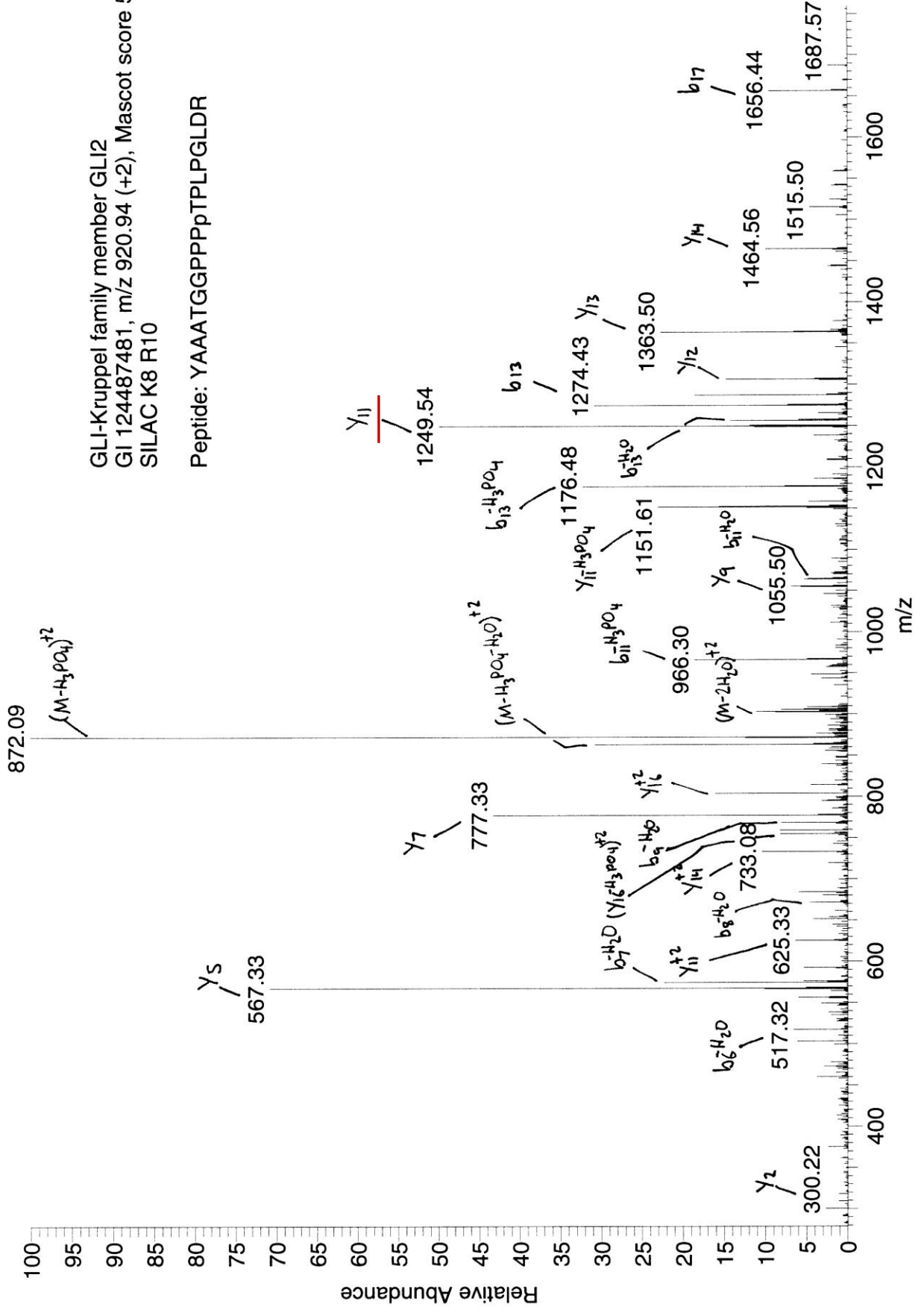
gap junction membrane channel protein alpha 1
 GI 6753992, m/z 823.37 (+2), Mascot score 20
 SILAC K8 R10

Peptide: SDPYHATTGPLpSPSK



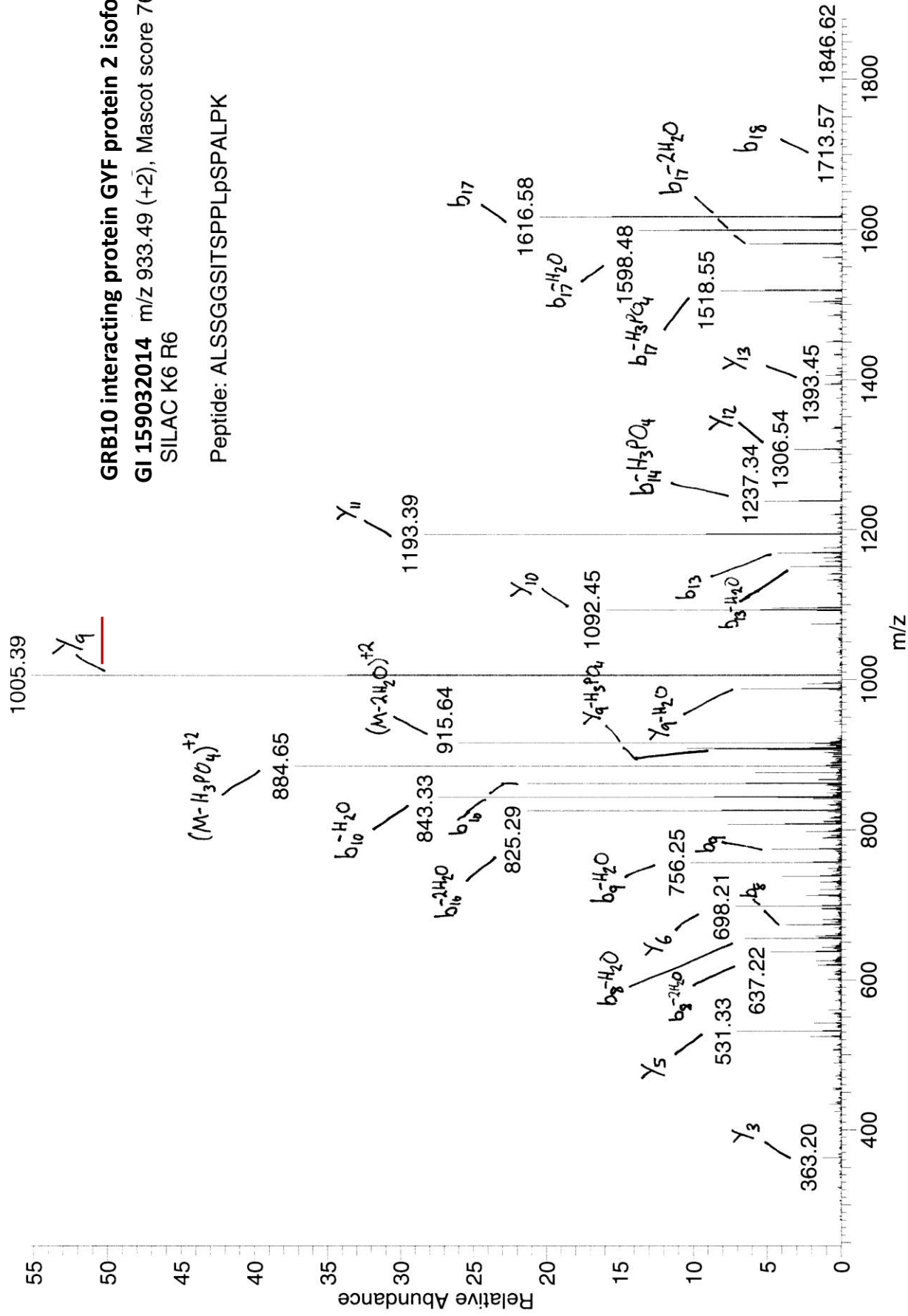
GLI-Kruppel family member GLI2
 GI 124487481, m/z 920.94 (+2), Mascot score 56
 SILAC K8 R10

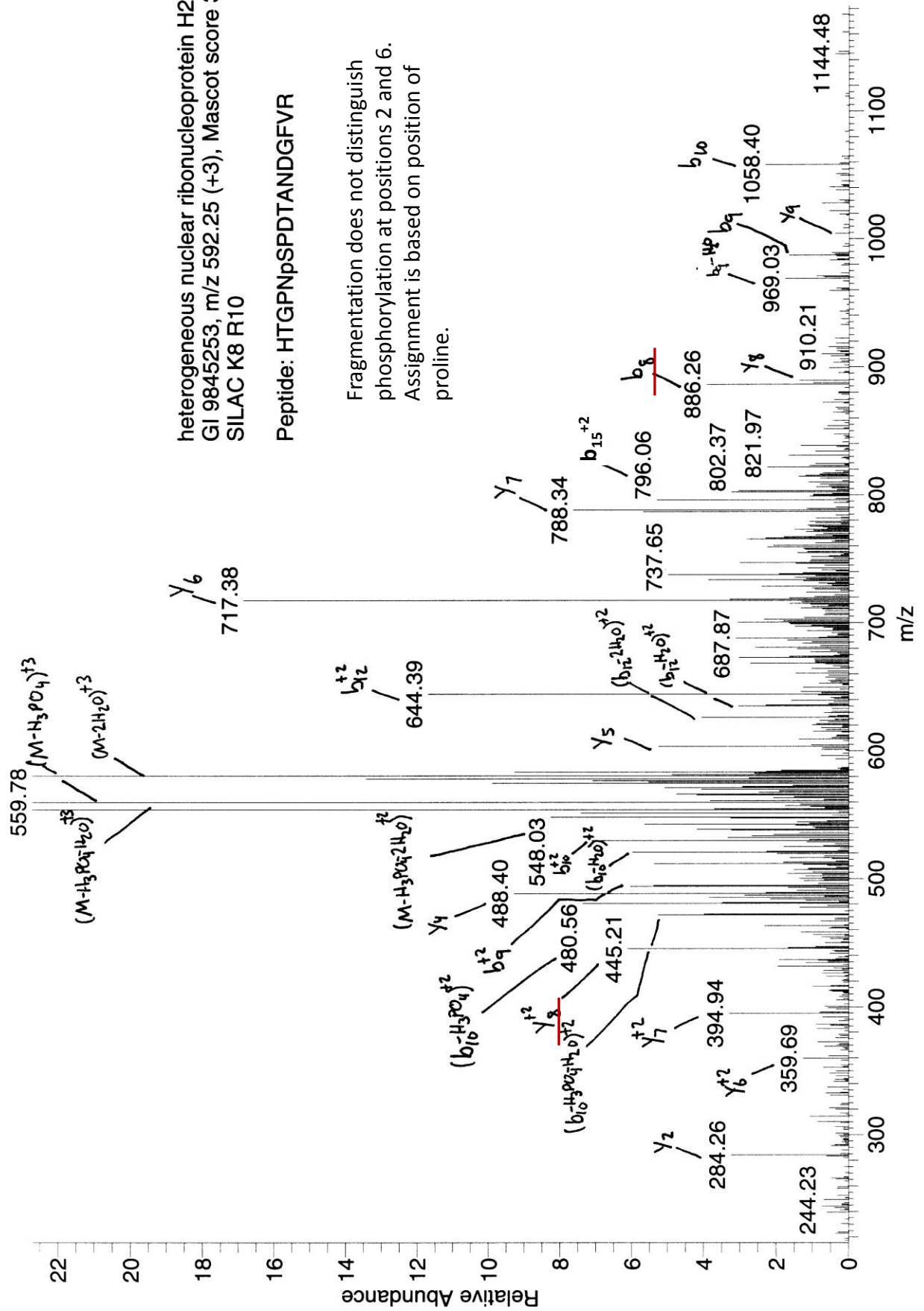
Peptide: YAAATGGPPPPpTPLPGLDR



GRB10 interacting protein GYF protein 2 isoform a
GI 159032014 m/z 933.49 (+2), Mascot score 76
 SILAC K6 R6

Peptide: ALSSGGSTITSPPLpSPALPK

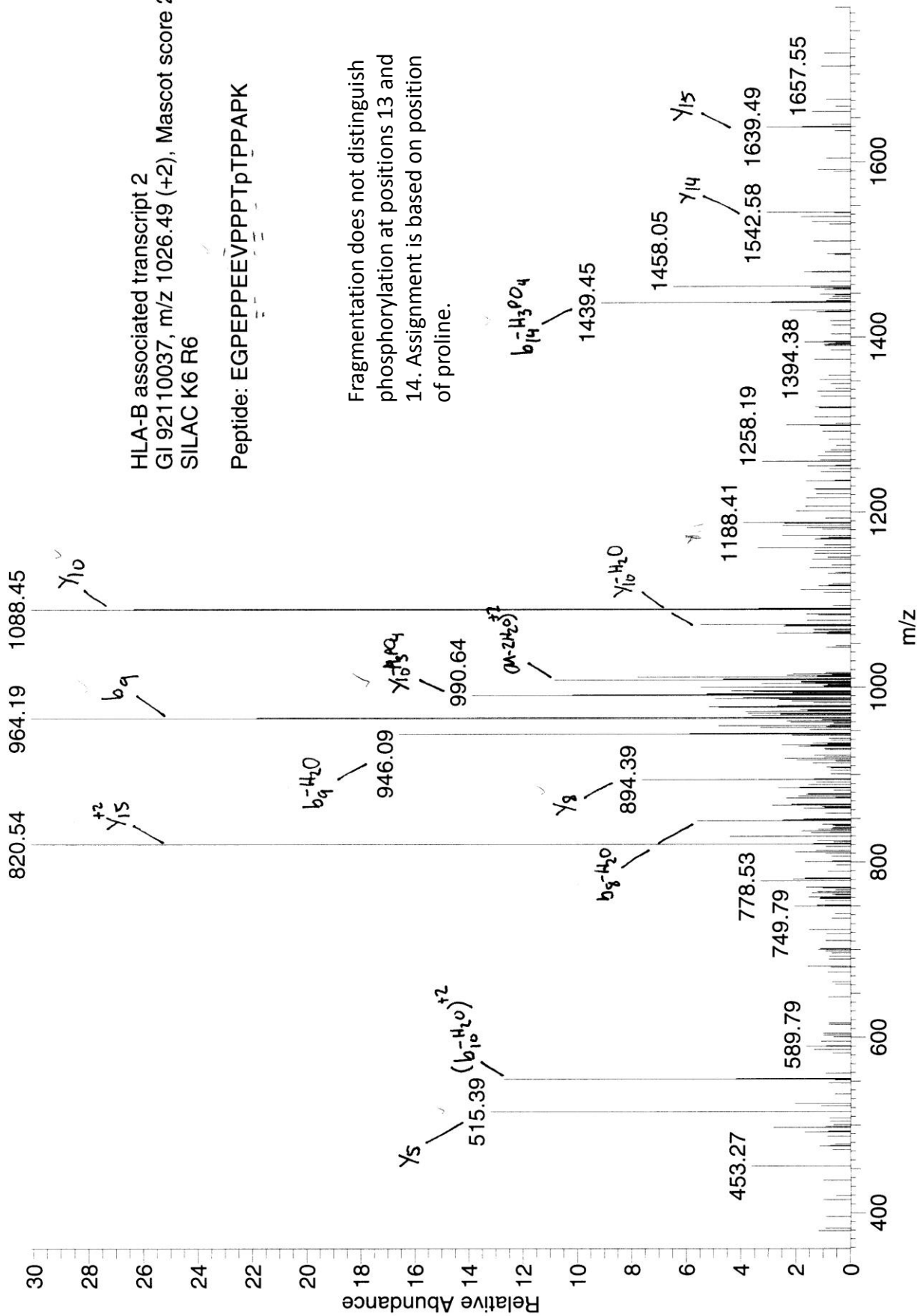




heterogeneous nuclear ribonucleoprotein H2
 GI 9845253, m/z 592.25 (+3), Mascot score 33
 SILAC K8 R10

Peptide: HTGPNpSPDTANDGFVR

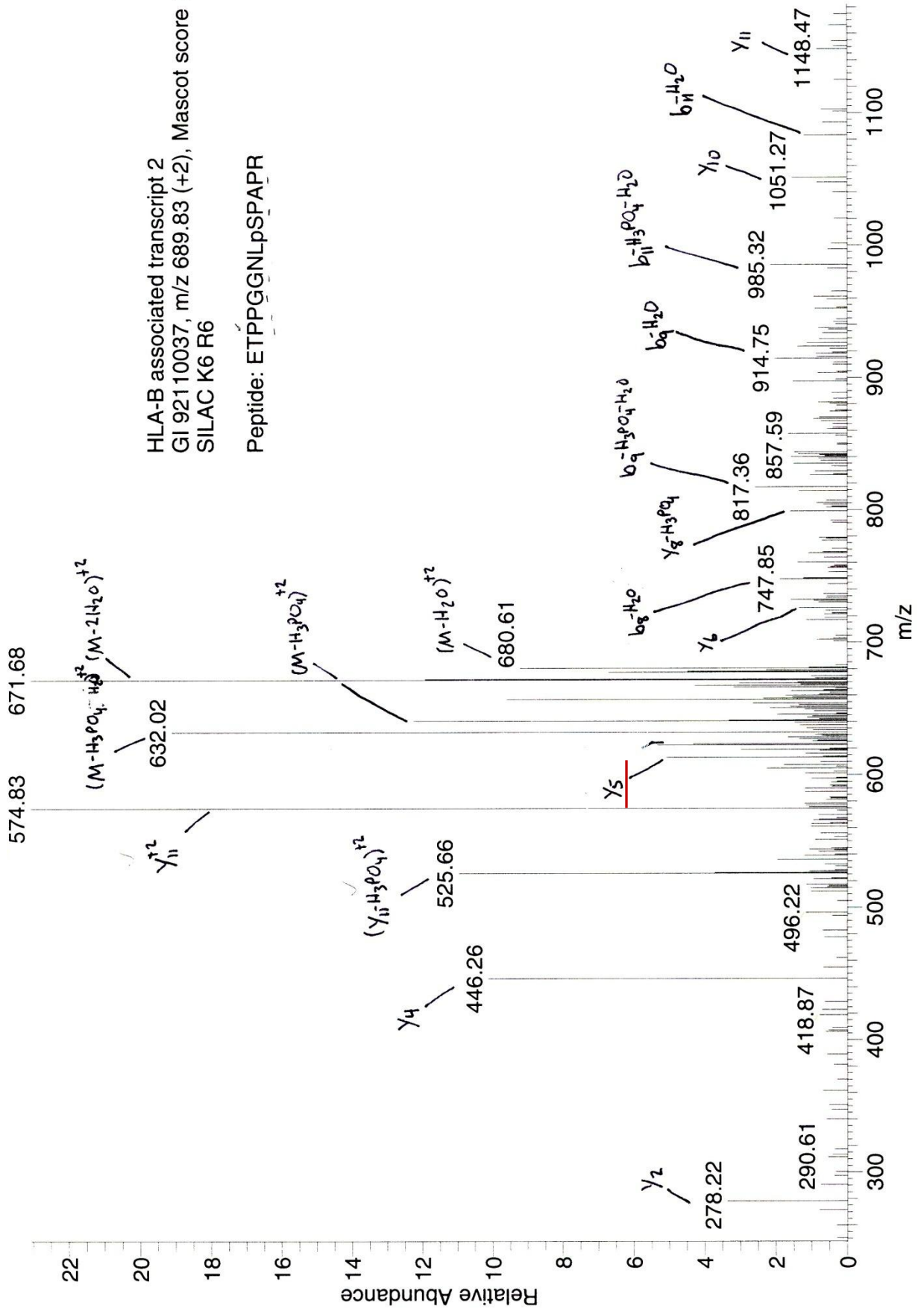
Fragmentation does not distinguish phosphorylation at positions 2 and 6. Assignment is based on position of proline.



HLA-B associated transcript 2
 GI 92110037, m/z 1026.49 (+2), Mascot score 20
 SILAC K6 R6

Peptide: EGPEPEEVPPTTPAPK

Fragmentation does not distinguish phosphorylation at positions 13 and 14. Assignment is based on position of proline.



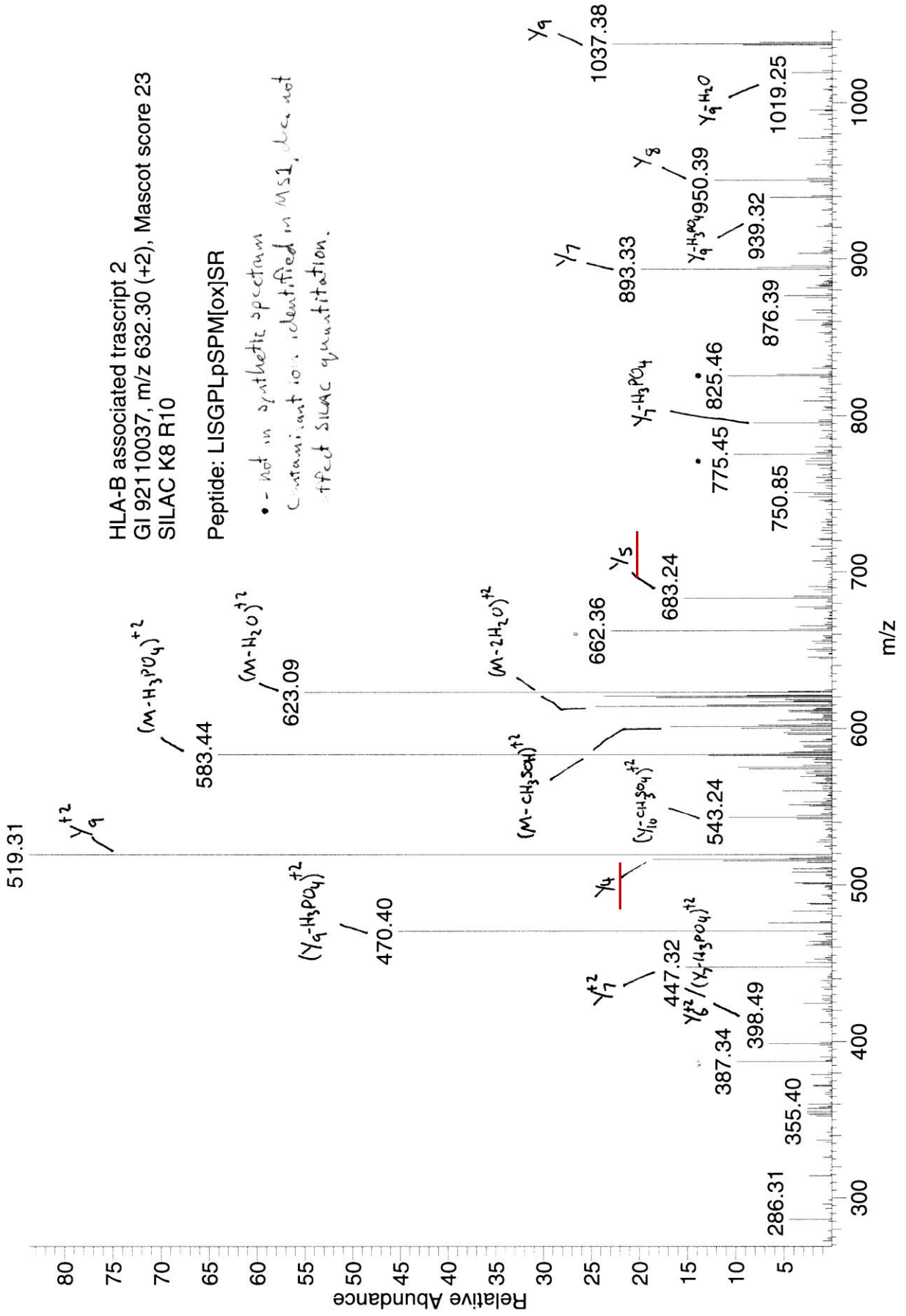
HLA-B associated transcript 2
 GI 92110037, m/z 689.83 (+2), Mascot score 19
 SILAC K6 R6

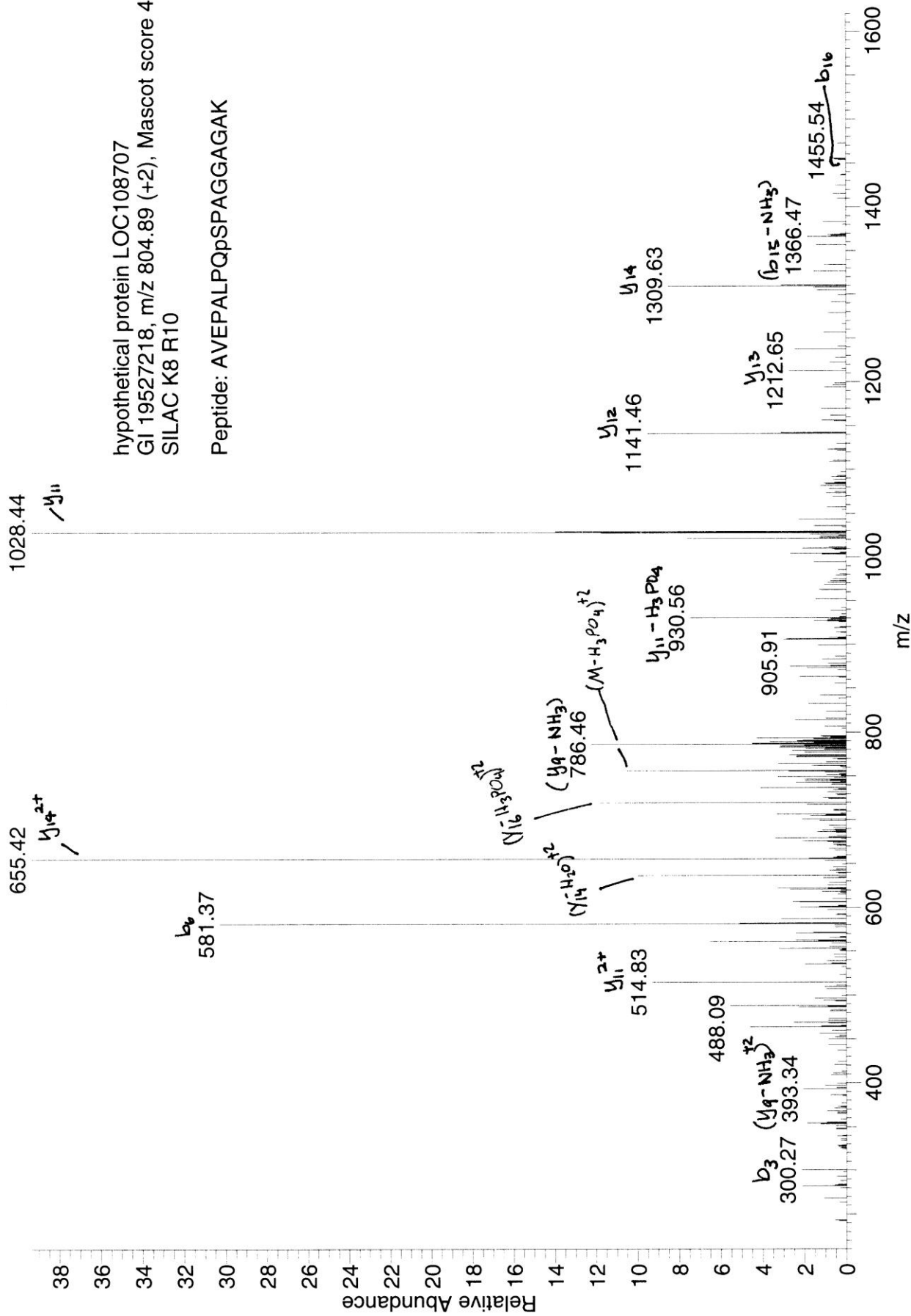
Peptide: ETPPGGNLpSPAPR

HLA-B associated transcript 2
 GI 92110037, m/z 632.30 (+2), Mascot score 23
 SILAC K8 R10

Peptide: LISGPLSPM[ox]SR

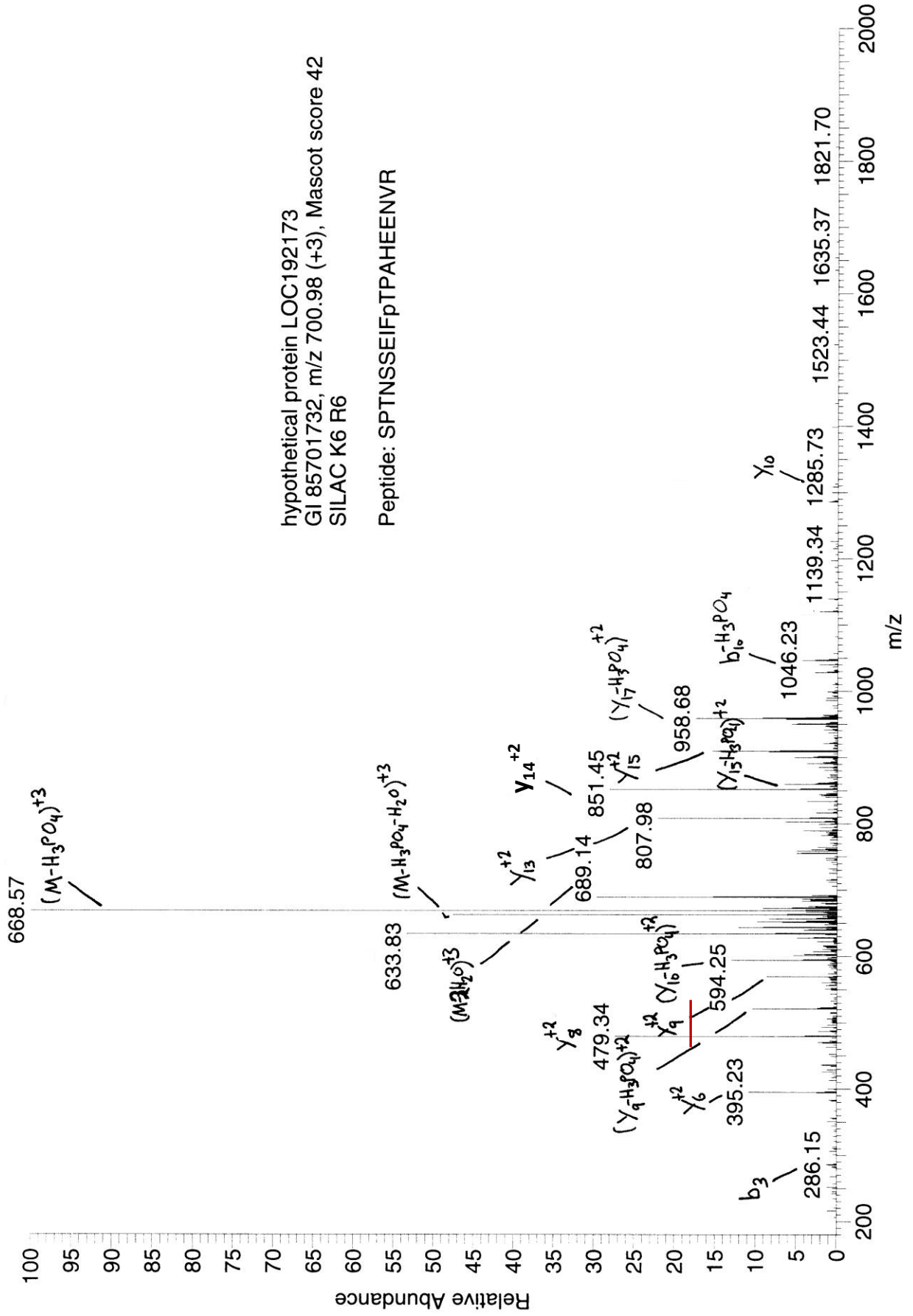
- not in synthetic spectrum
- Contaminant ion, identified in MS1, does not affect SILAC quantitation.





hypothetical protein LOC108707
 GI 19527218, m/z 804.89 (+2), Mascot score 41
 SILAC K8 R10

Peptide: AVEPALPQpSPAGGAGAK



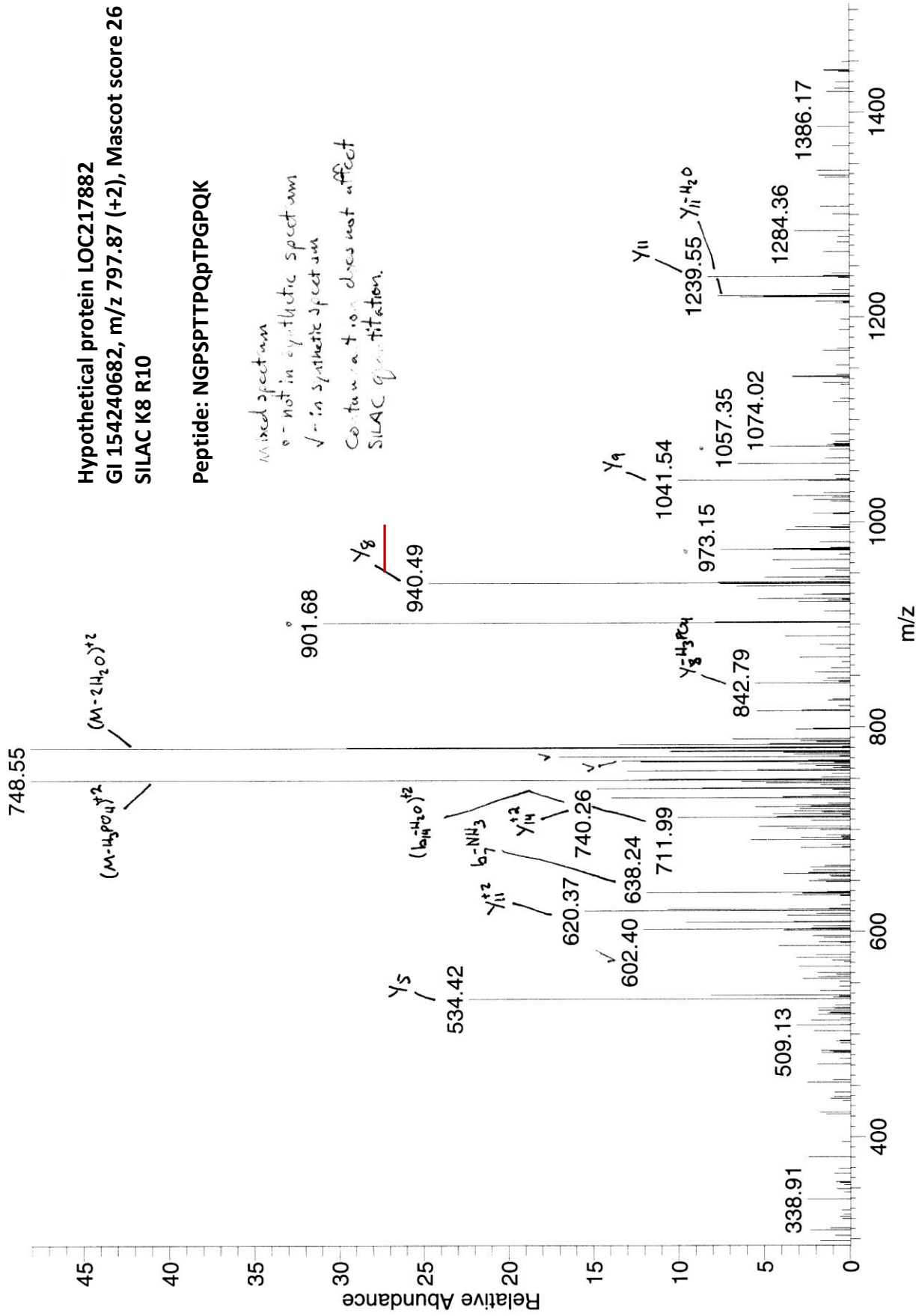
hypothetical protein LOC192173
 GI 85701732, m/z 700.98 (+3), Mascot score 42
 SILAC K6 R6

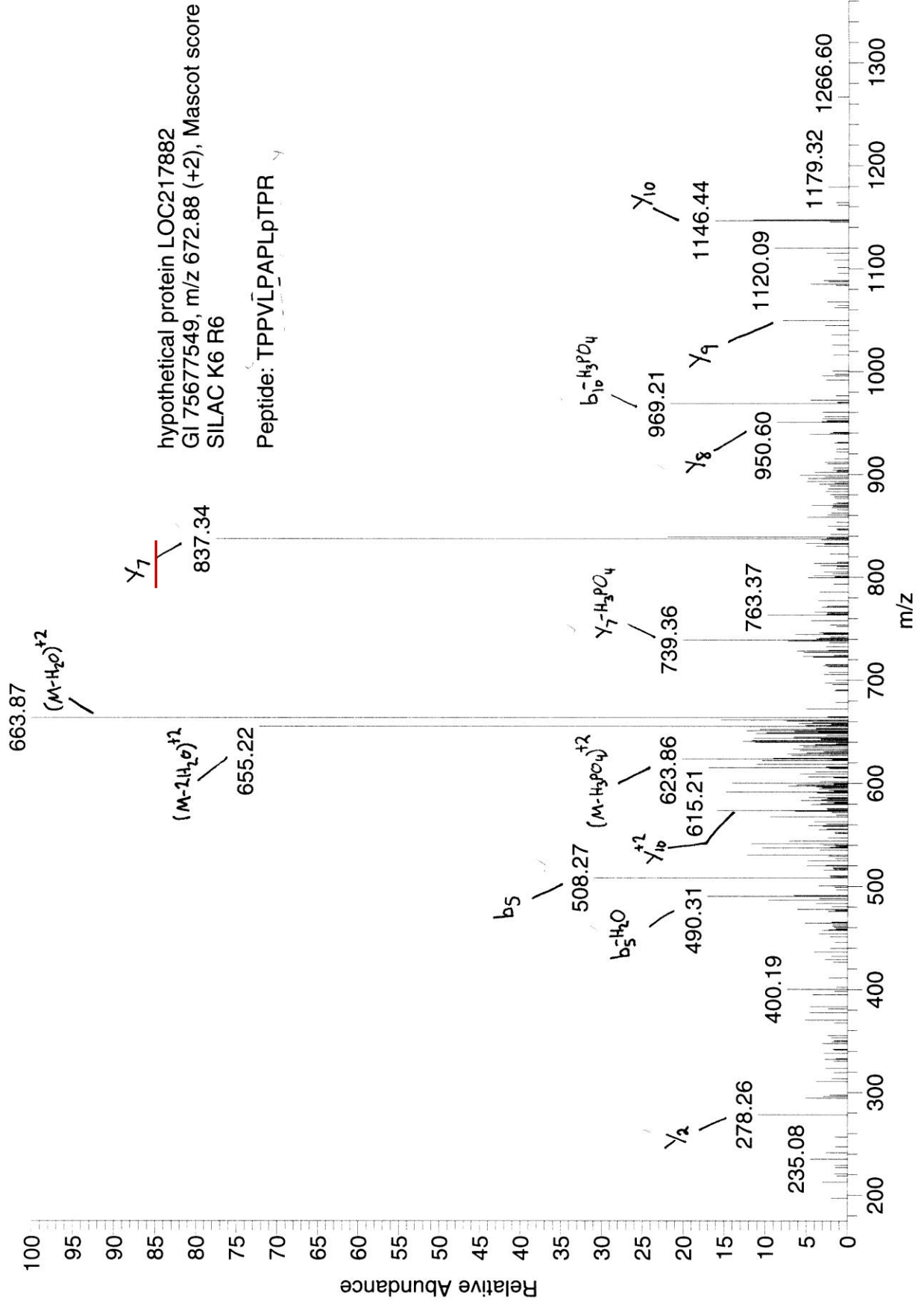
Peptide: SPTNSSEIFpTPAHEENVr

Hypothetical protein LOC217882
 GI 154240682, m/z 797.87 (+2), Mascot score 26
 SILAC K8 R10

Peptide: NGPSPTTPQpTPGPQK

Mixed spectrum
 ✓ - not in synthetic spectrum
 ✓ - in synthetic spectrum
 Contaminant ion does not affect
 SILAC quantitation.





hypothetical protein LOC217882
 GI 75677549, m/z 672.88 (+2), Mascot score 19
 SILAC K6 R6

Peptide: TPPVLPAPLPTR

972.32

34

32

30

28

26

24

22

20

18

16

14

12

10

8

6

4

2

0

Relative Abundance

γ_8

$(M-2H_2O)^{+2}$

$(M-H_3PO_4)^{+2}$ 869.04

γ_4

482.30

838.10

$(M-H_3PO_4+H_2O)^{+2}$

b_7-2H_2O

b_7

b_7-H_2O

765.26

γ_5

γ_5-H_2O

b_6-NH_3

b_6

663.34

γ_5+H_2O

550.18

b_5+H_2O

453.05

γ_9

1059.45

$\gamma_8+H_3PO_4$

γ_7

$\gamma_{16}+NH_3$

b_{10}

γ_6+H_2O

1110.23

$b_{11}-H_3PO_4$

γ_{11}

$b_{11}+H_3PO_4+H_2O$

$\gamma_{11}-H_2O$

b_{11}

1193.37

1274.38

1291.04

1432.73

1539.23

1400

1200

1000

800

600

400

0

m/z

hypothetical protein LOC75687
GI 145301546, m/z 886.89 (+2), Mascot score 57
SILAC K8 R10

Peptide: FSTYSQSPDPpTPSLR

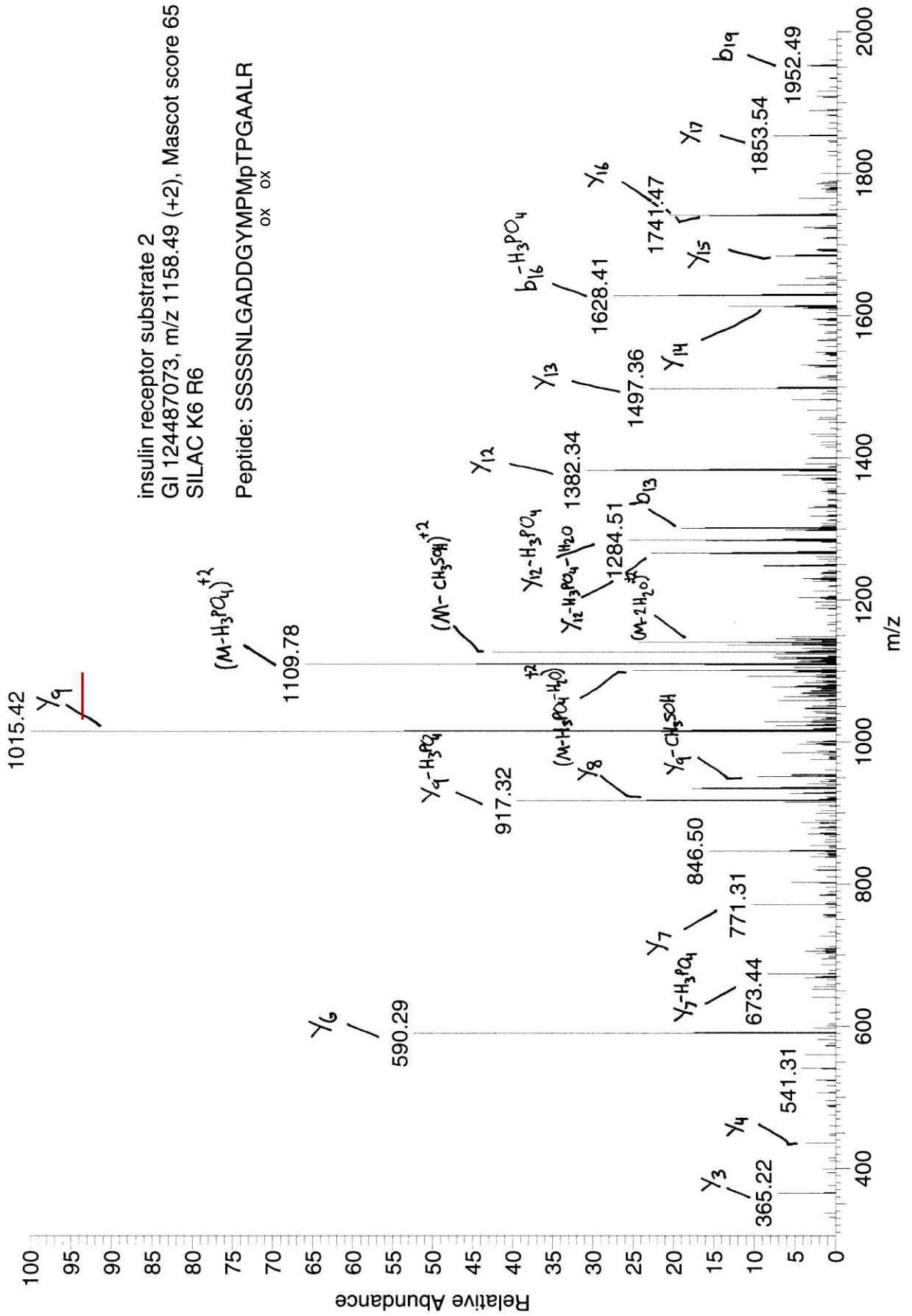
$b_{14}+H_2O$

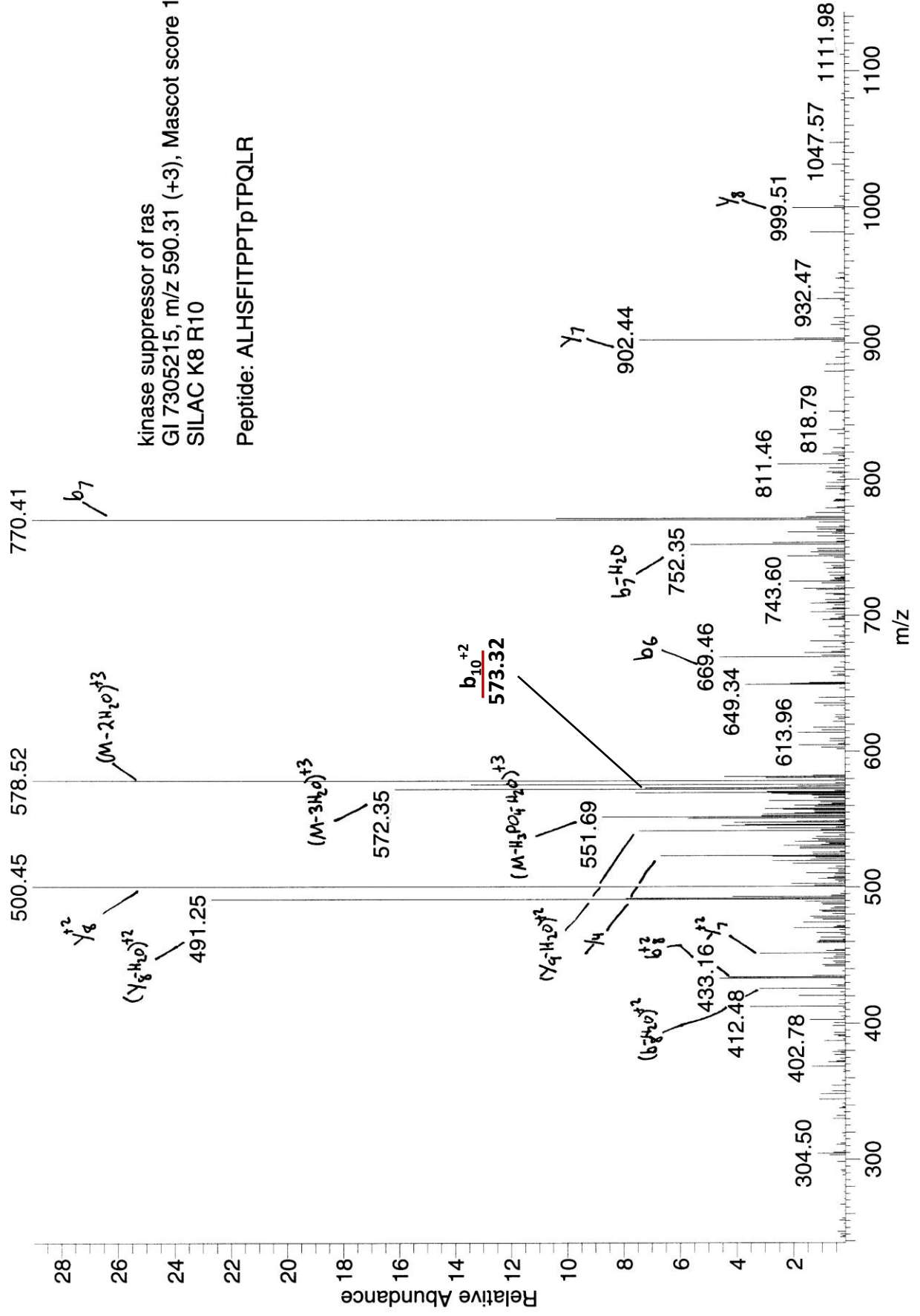
1588.61

γ_{12}

1539.23

1600

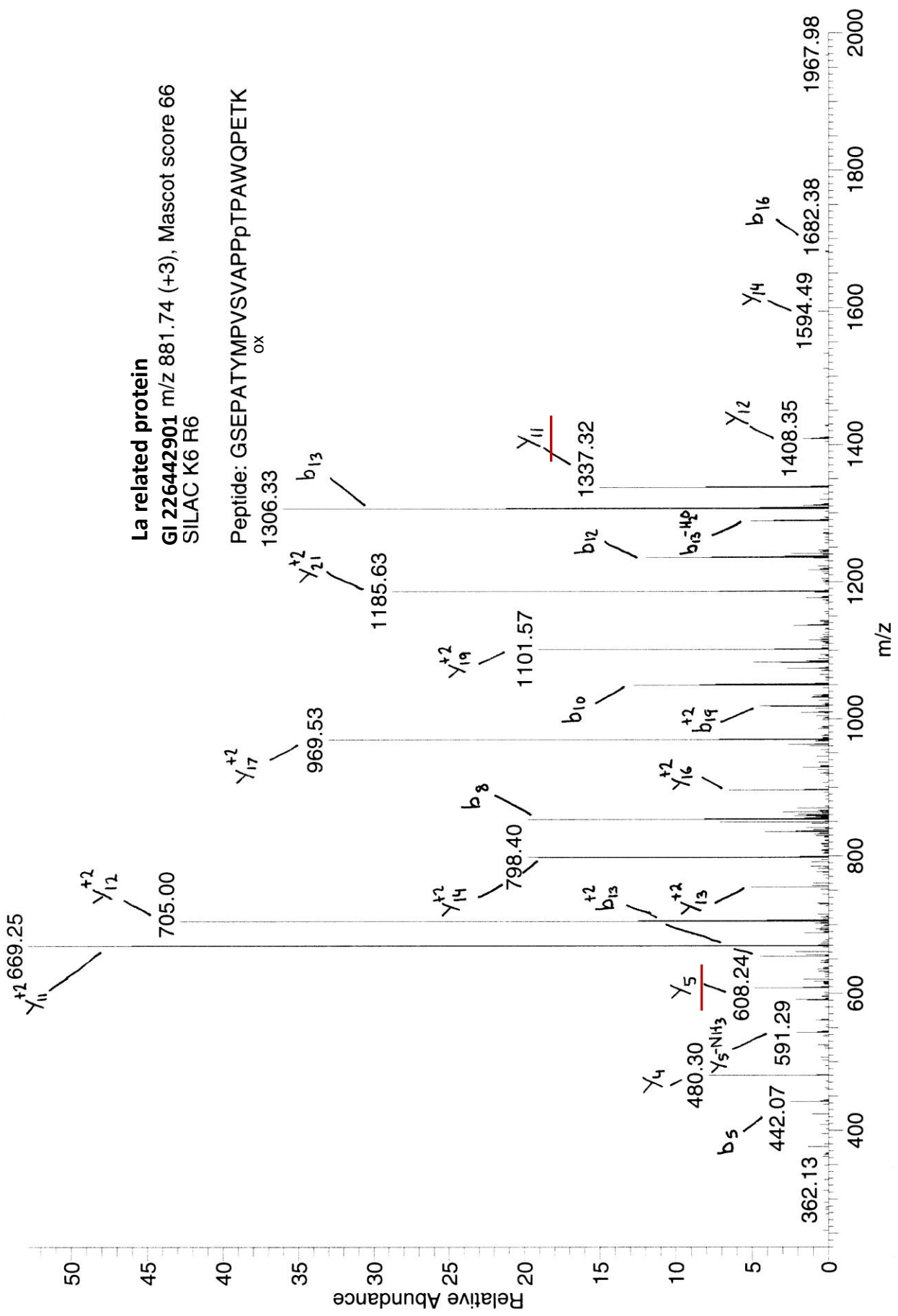


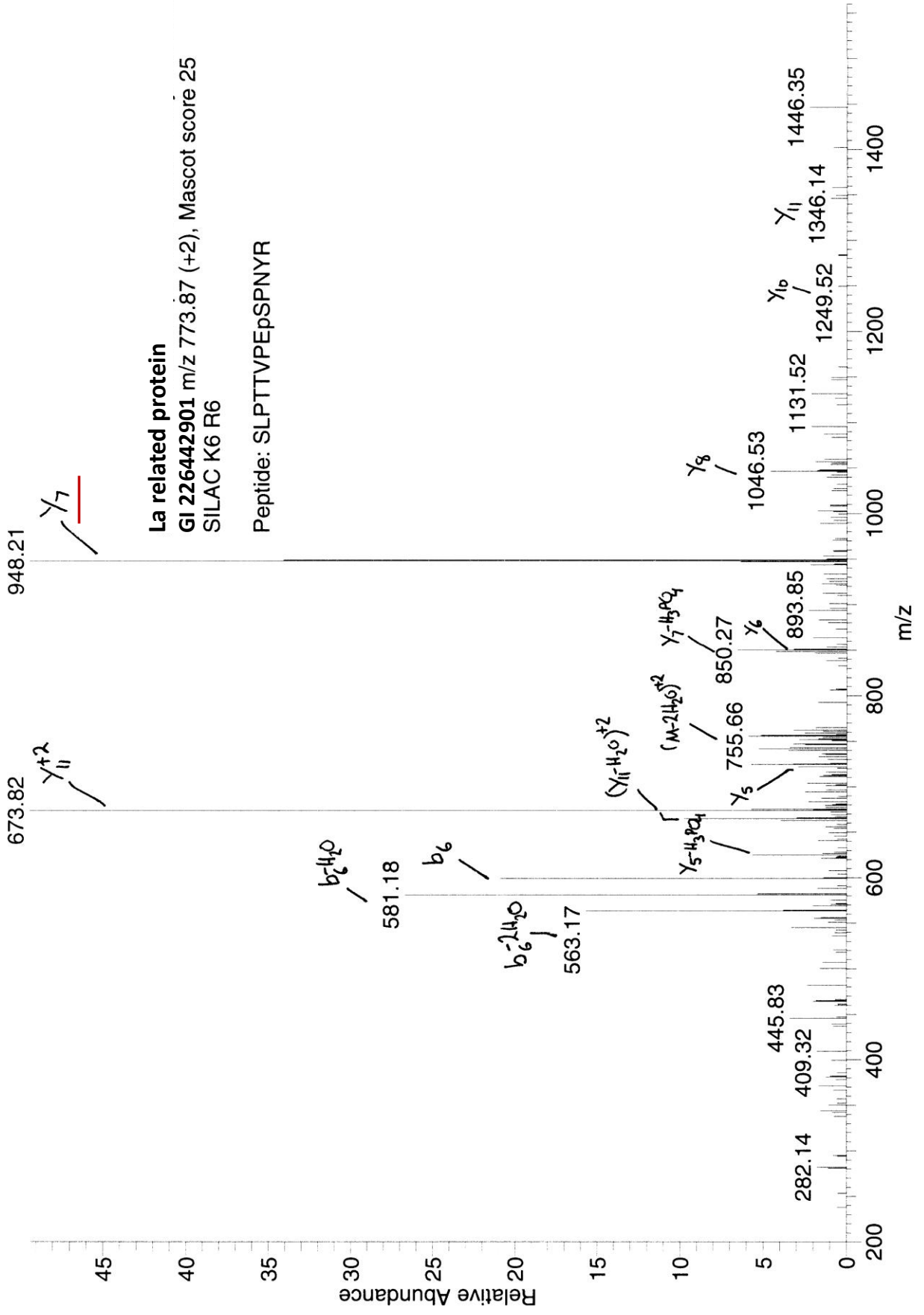


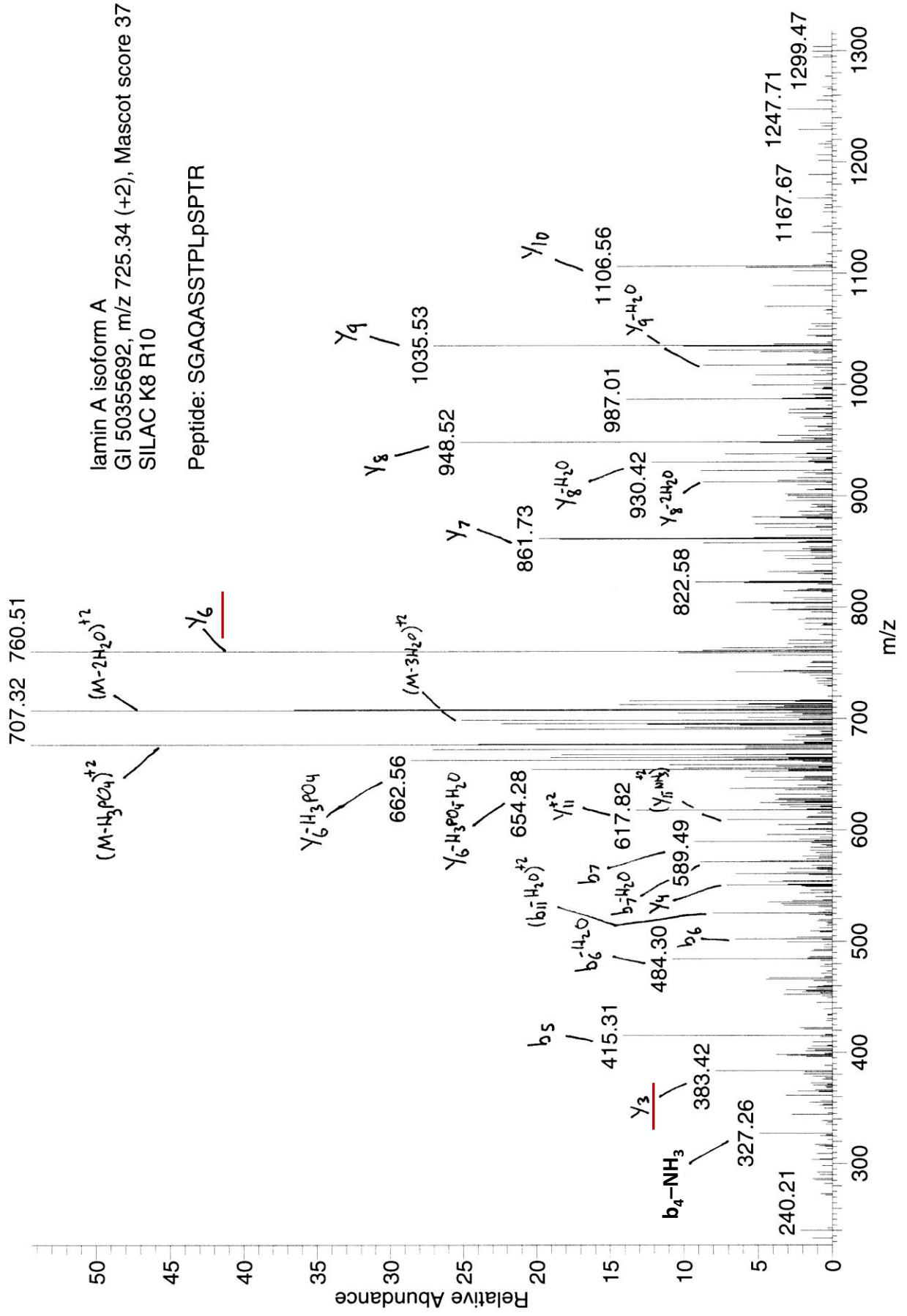
La related protein

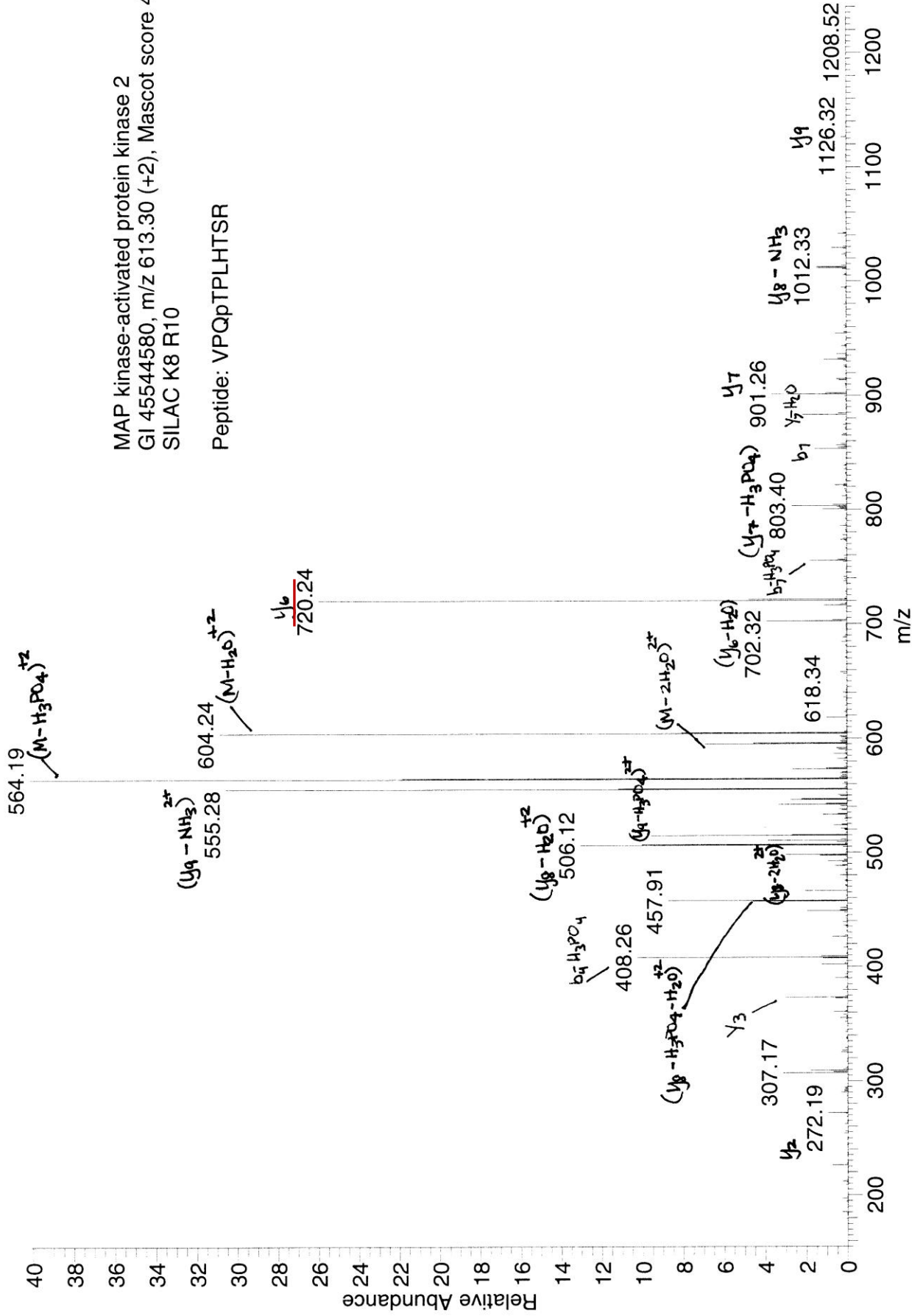
GI 226442901 m/z 881.74 (+3), Mascot score 66
SILAC K6 R6

Peptide: GSEPATYMPVSVAPPpTPAWQPETK
ox







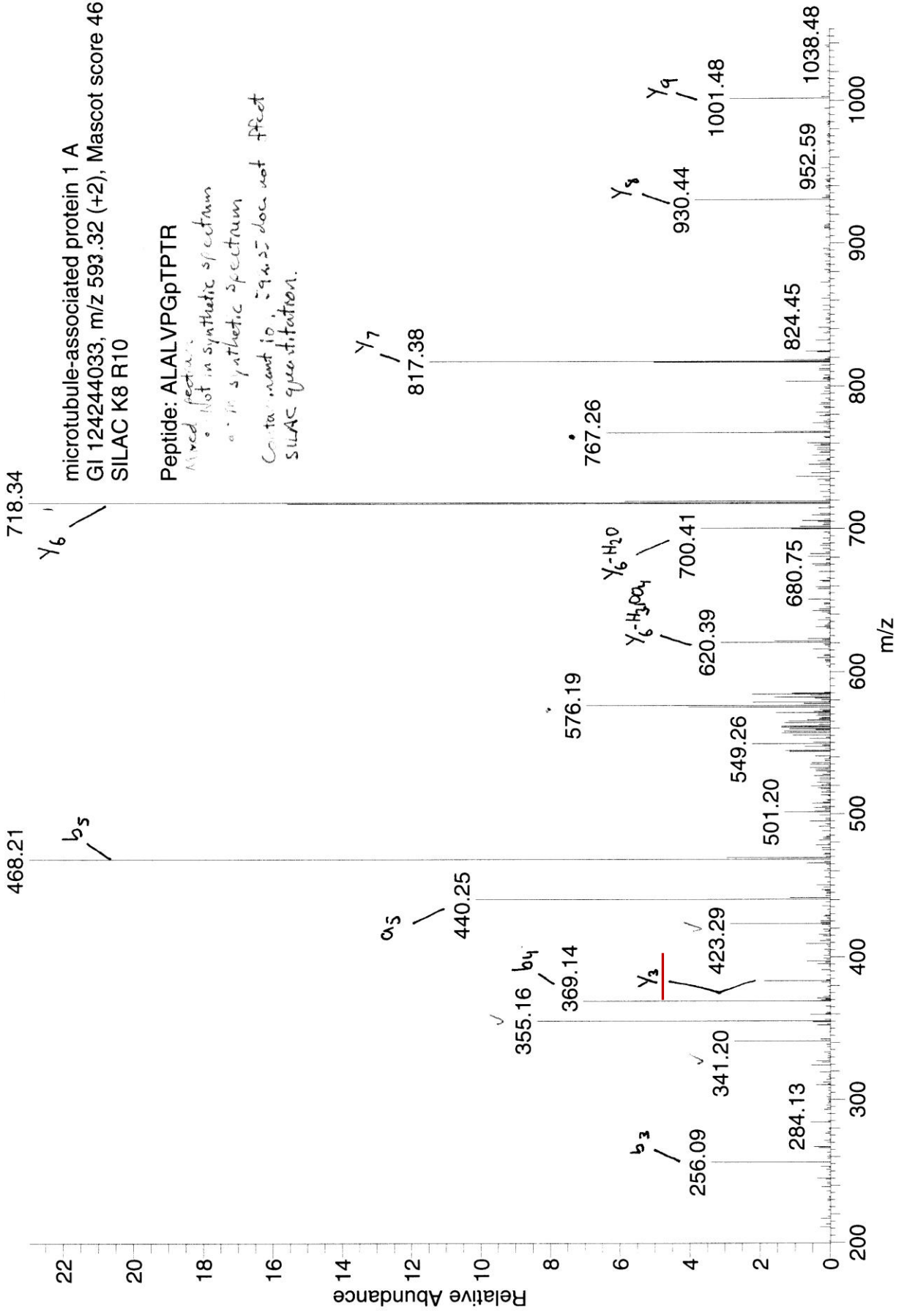


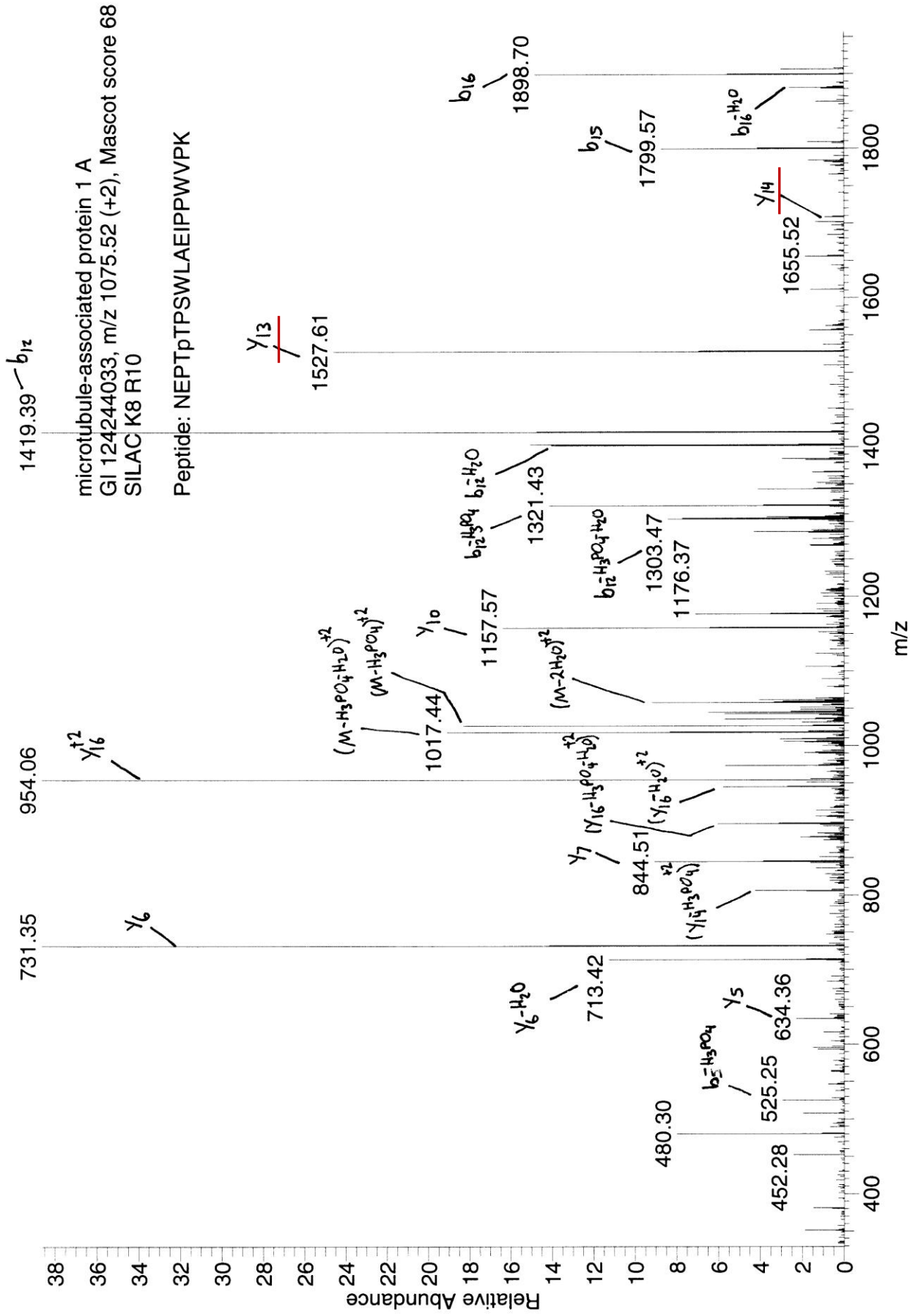
MAP kinase-activated protein kinase 2
 GI 45544580, m/z 613.30 (+2), Mascot score 47
 SILAC K8 R10
 Peptide: VPQpTPLHTSR

microtubule-associated protein 1 A
 GI 124244033, m/z 593.32 (+2), Mascot score 46
 SILAC K8 R10

Peptide: ALALVPGpTPTR

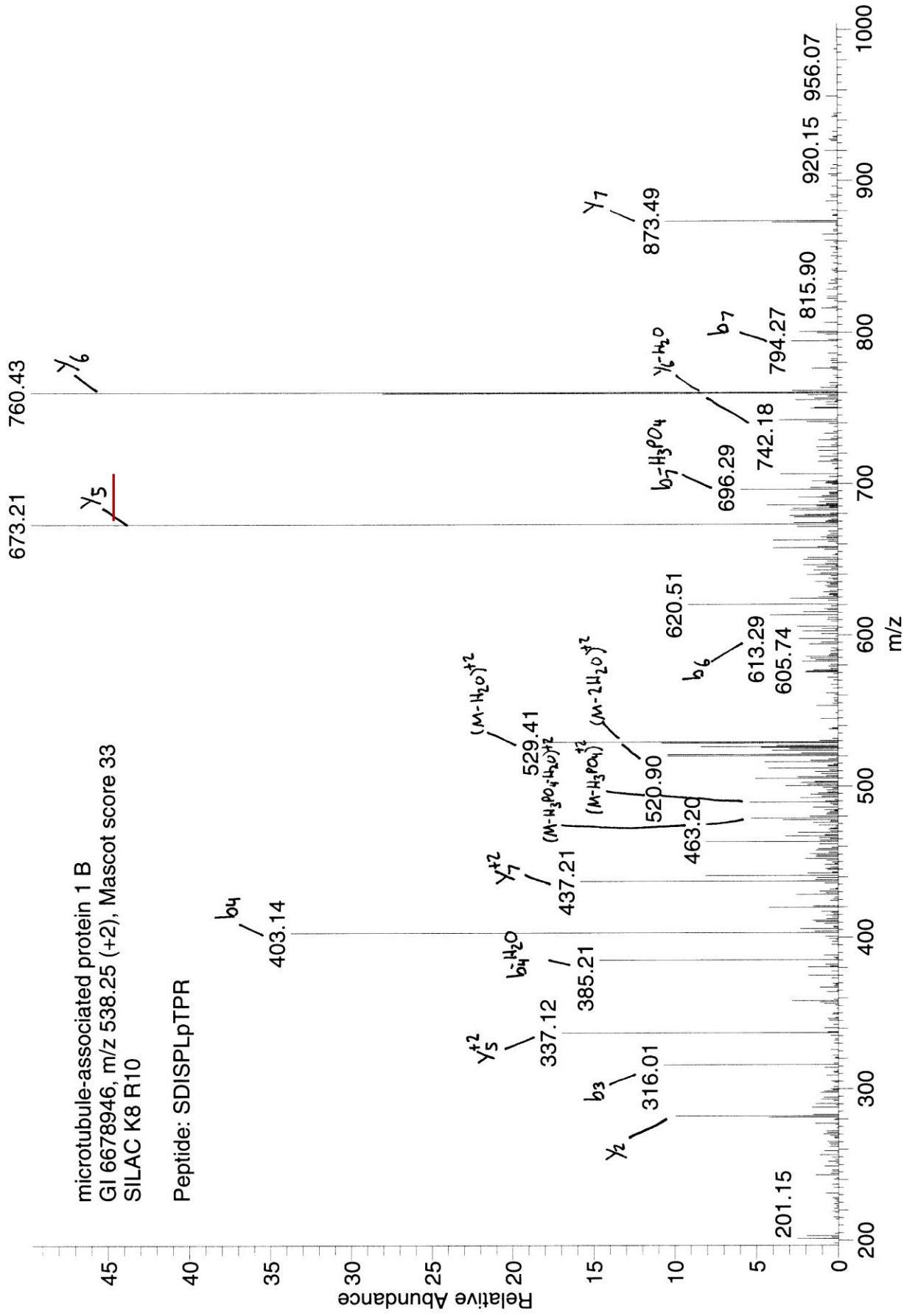
Mixed peptide.
 Not in synthetic spectrum
 as in synthetic spectrum
 Contains most is, 593.32 does not fit
 SILAC quantitation.

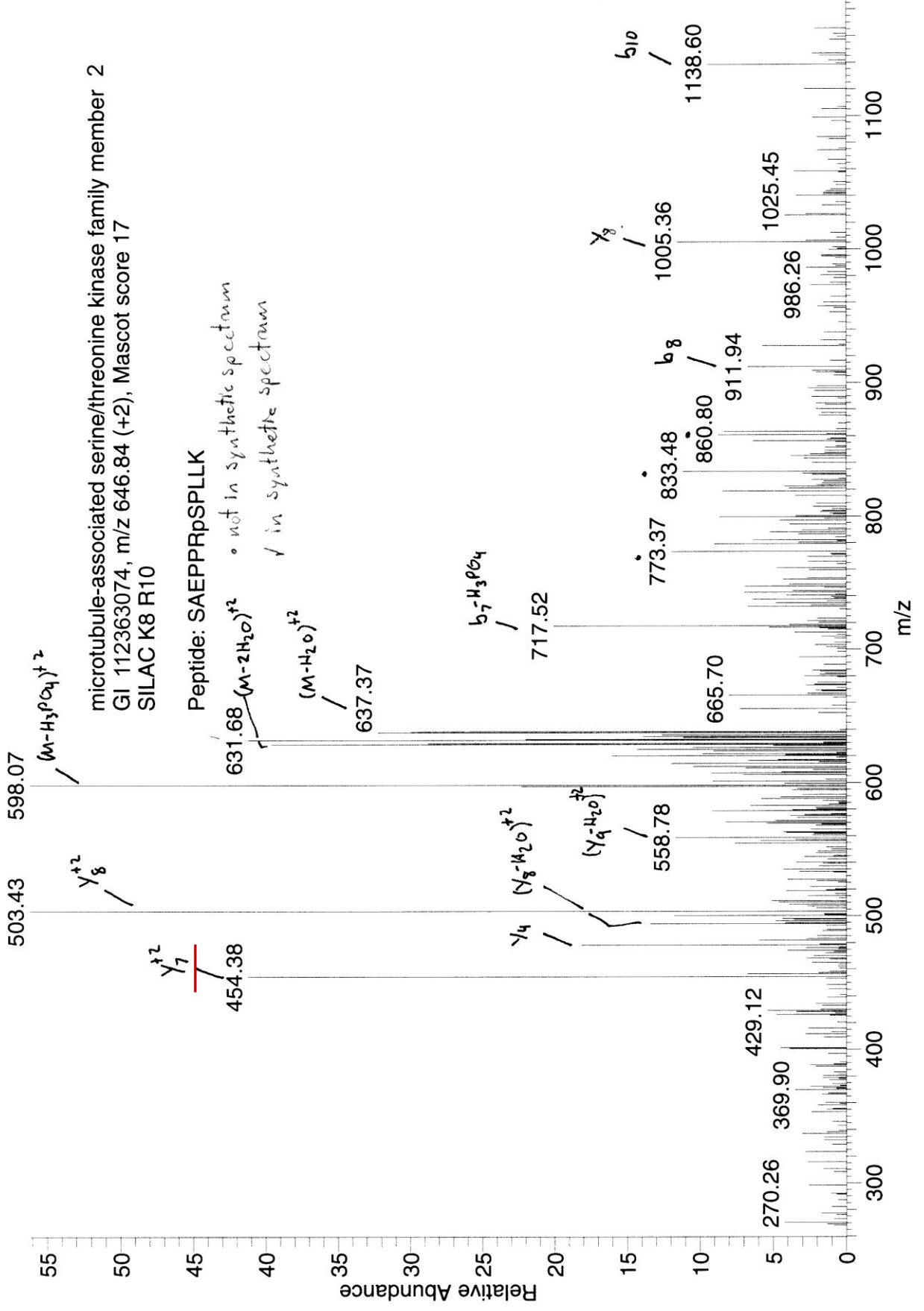




microtubule-associated protein 1 B
GI 6678946, m/z 538.25 (+2), Mascot score 33
SILAC K8 R10

Peptide: SDISPLpTPR





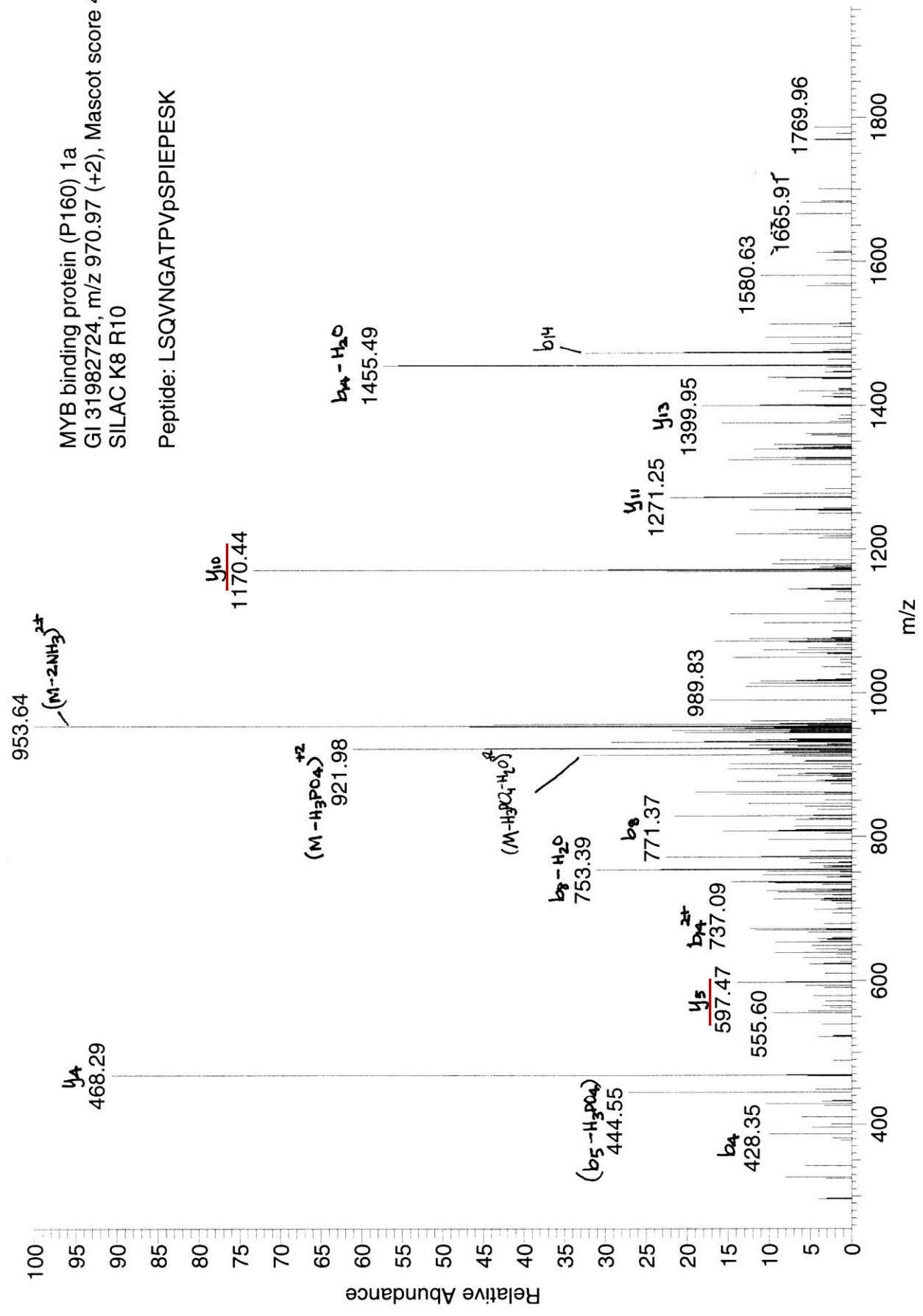
microtubule-associated serine/threonine kinase family member 2
 GI 112363074, m/z 646.84 (+2), Mascot score 17
 SILAC K8 R10

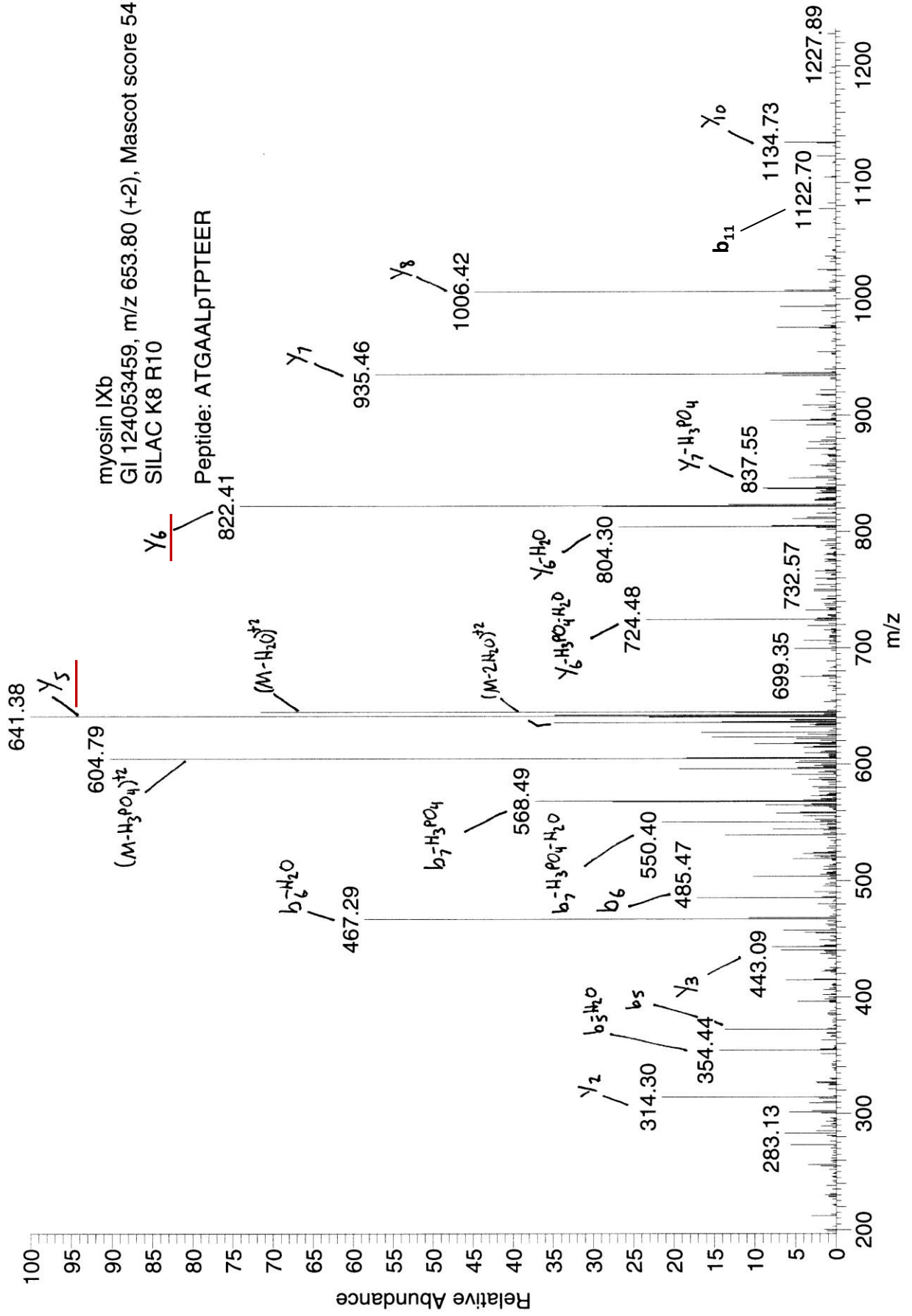
Peptide: SAEPPRpSPLLK

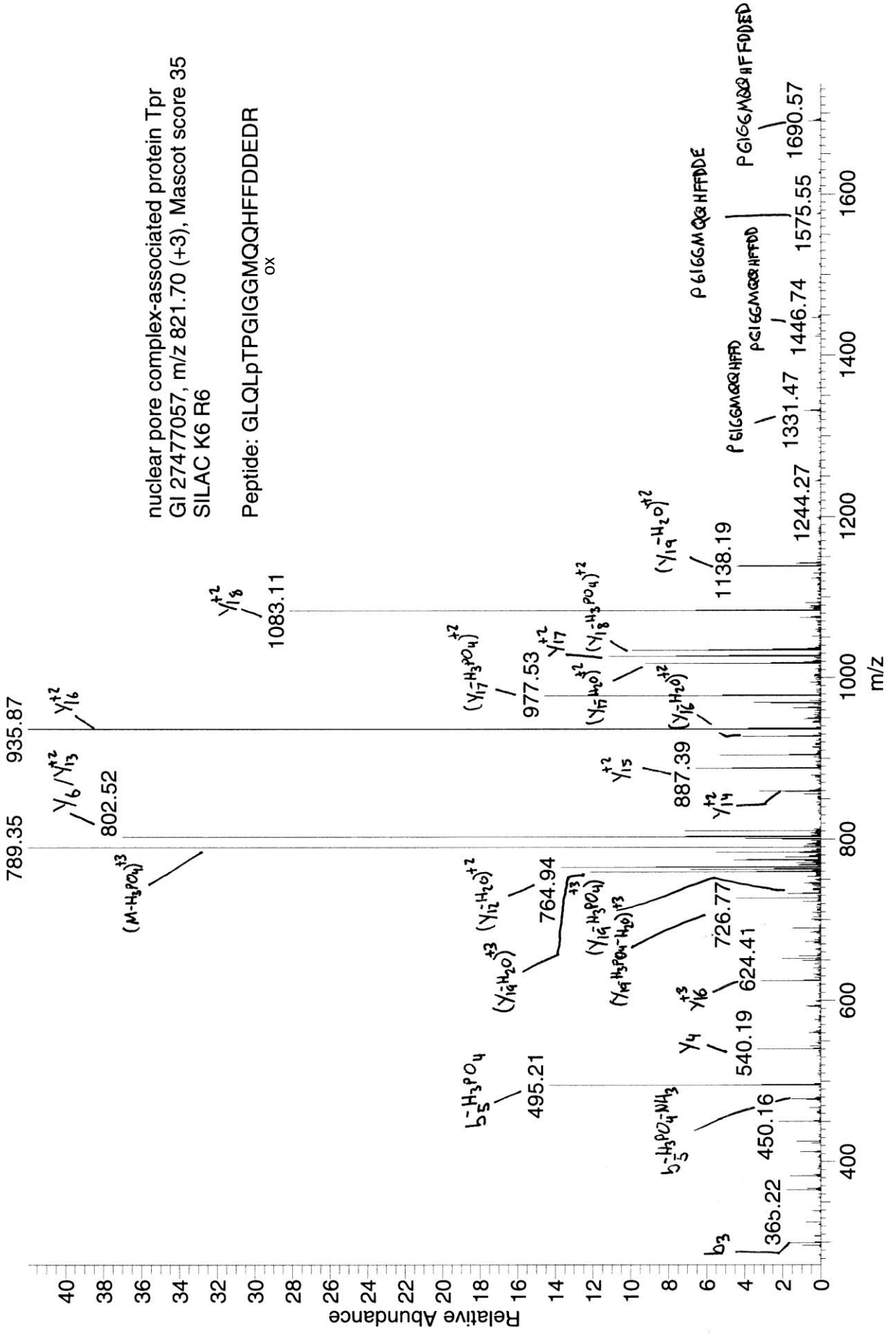
• not in synthetic spectrum
 ✓ in synthetic spectrum

MYB binding protein (P160) 1a
GI 31982724, m/z 970.97 (+2), Mascot score 41
SILAC K8 R10

Peptide: LSQVNGATPVpSPIEPESK



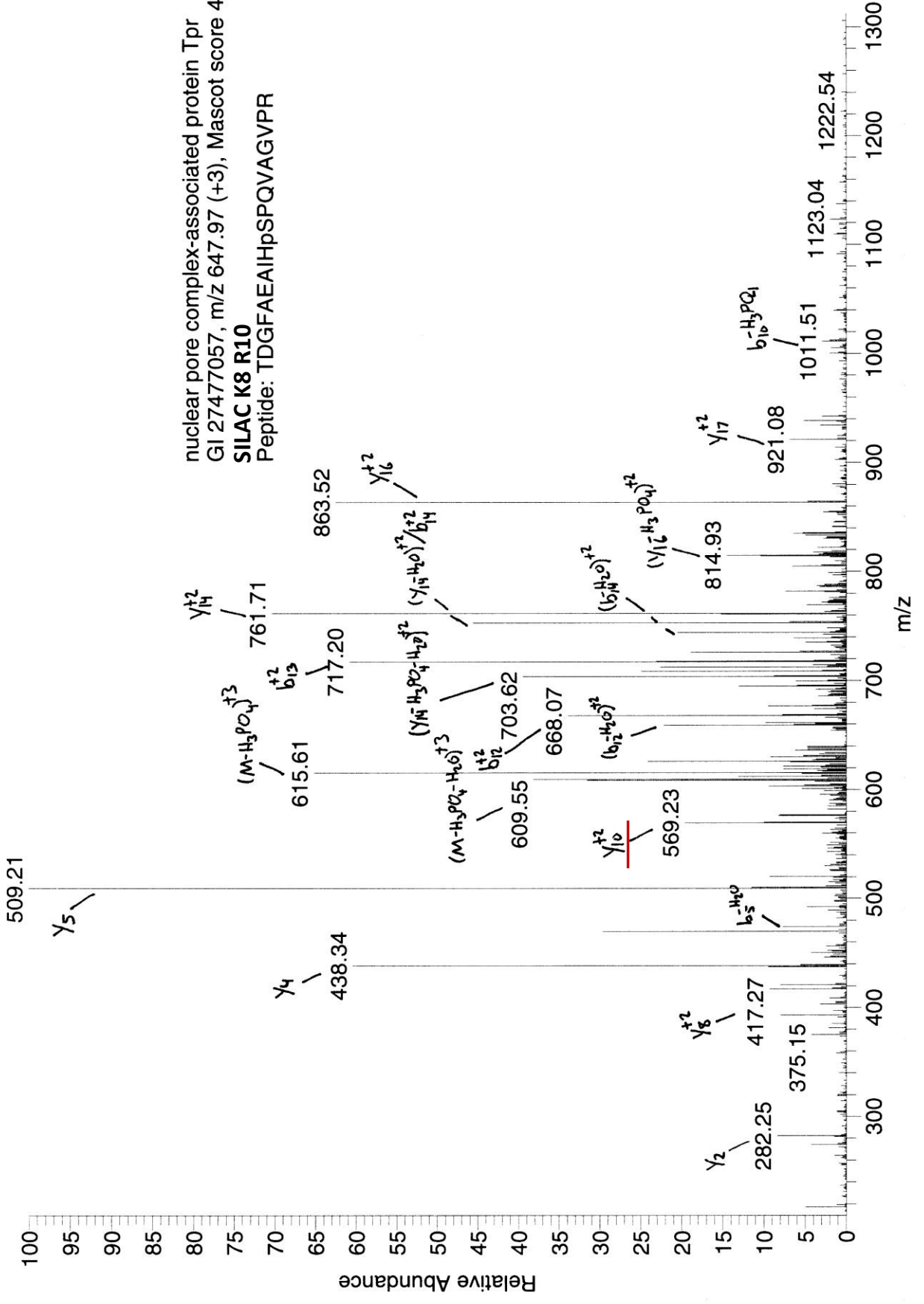




nuclear pore complex-associated protein Tpr
 GI 27477057, m/z 821.70 (+3), Mascot score 35
 SILAC K6 R6

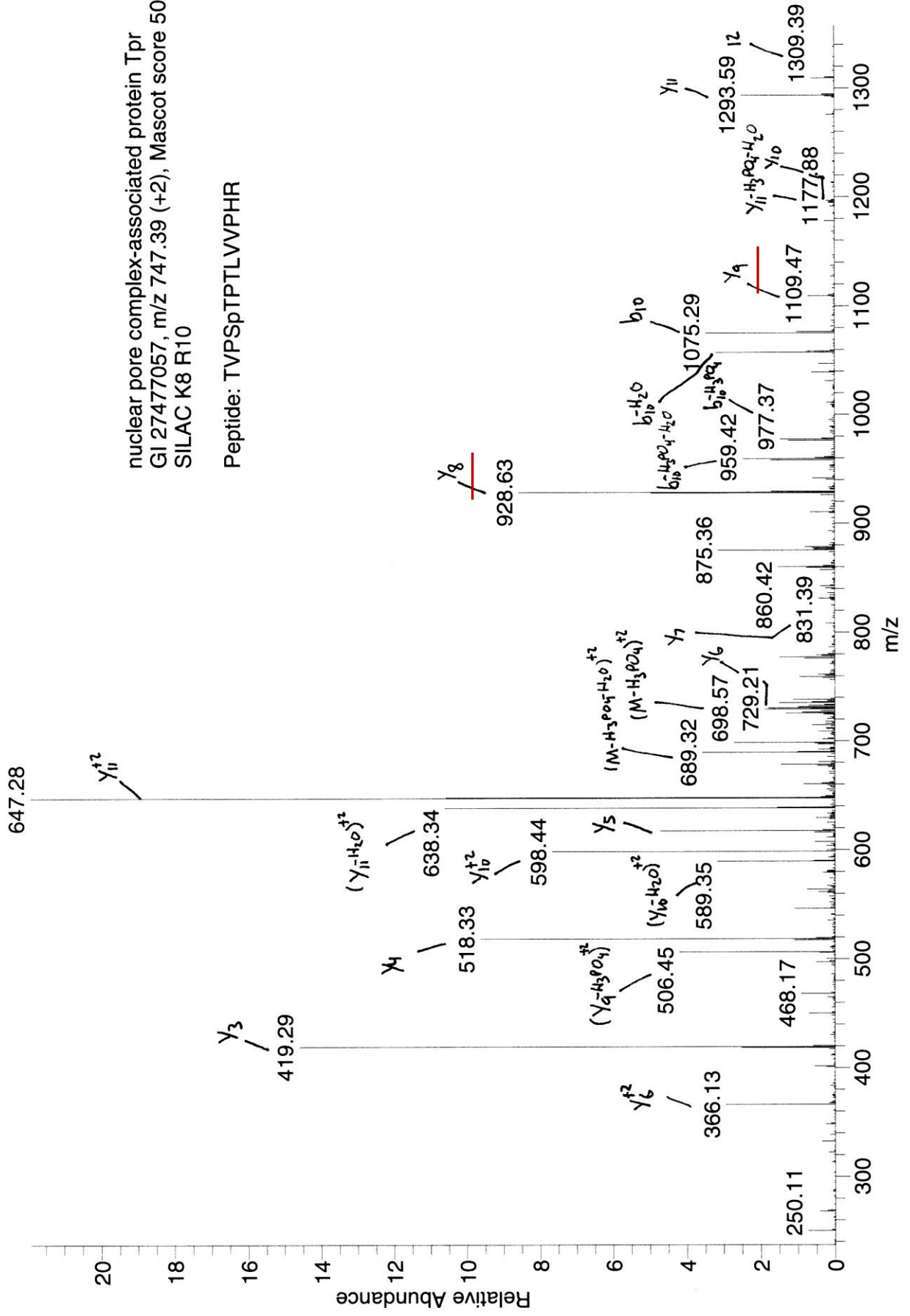
Peptide: GLQLpTPGIGGMQQHFFDDED_{ox}

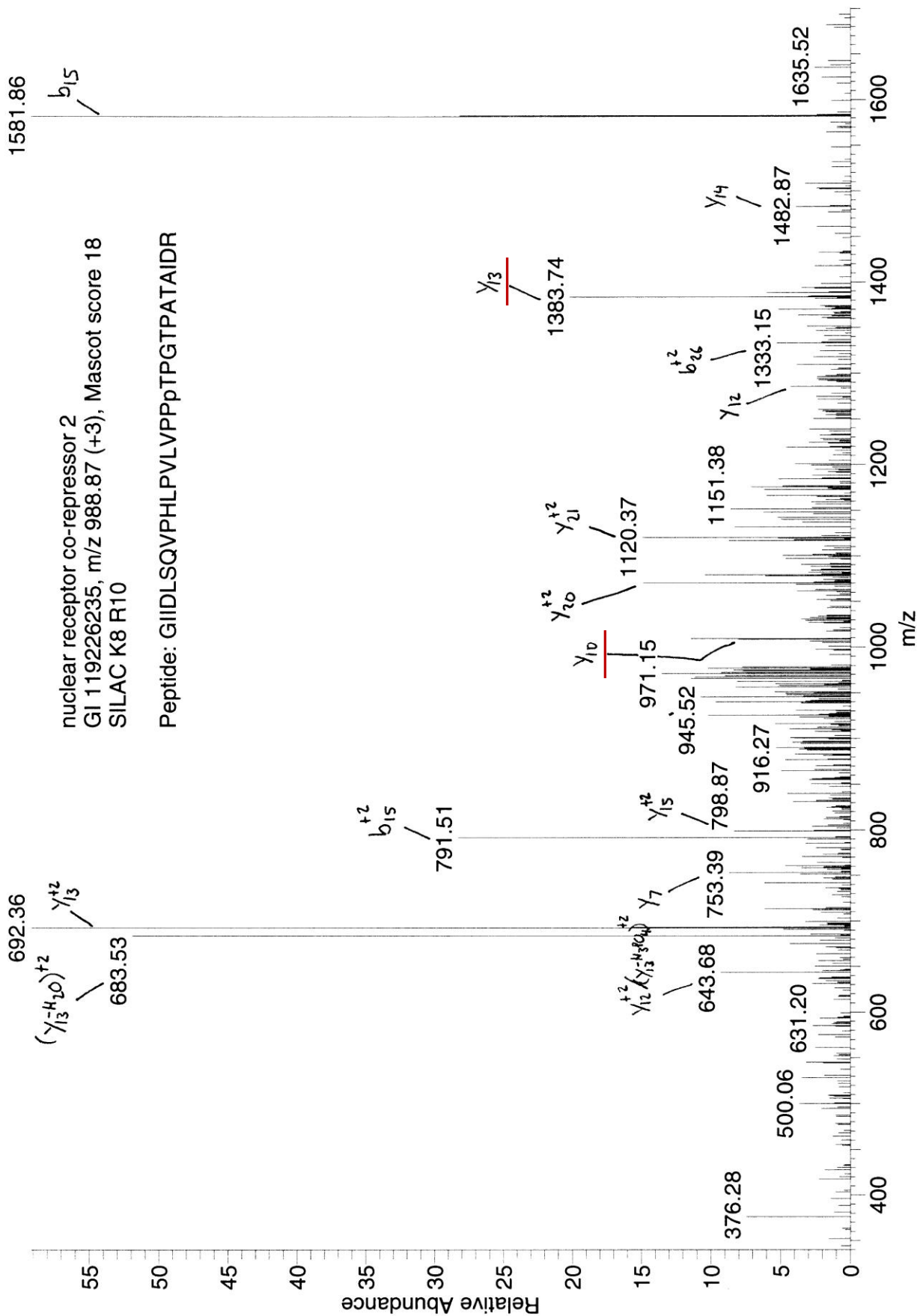
nuclear pore complex-associated protein Tpr
 GI 27477057, m/z 647.97 (+3), Mascot score 47
SILAC K8 R10
 Peptide: TDGFAEAIHpSPQVAGVPR



nuclear pore complex-associated protein Tpr
 GI 27477057, m/z 747.39 (+2), Mascot score 50
 SILAC K8 R10

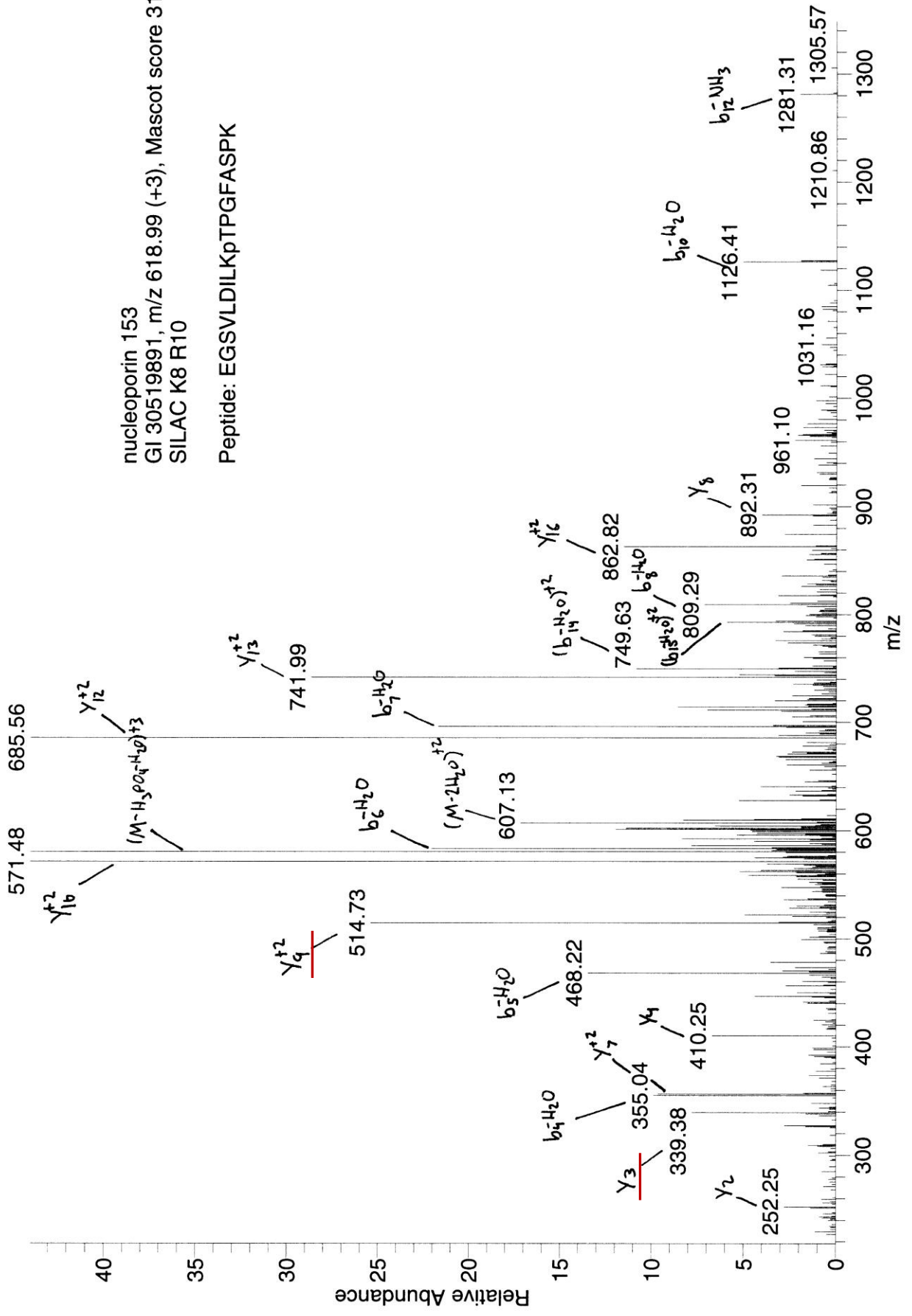
Peptide: TVPSPtPTLVVPHR





nucleoporin 153
 GI 30519891, m/z 618.99 (+3), Mascot score 31
 SILAC K8 R10

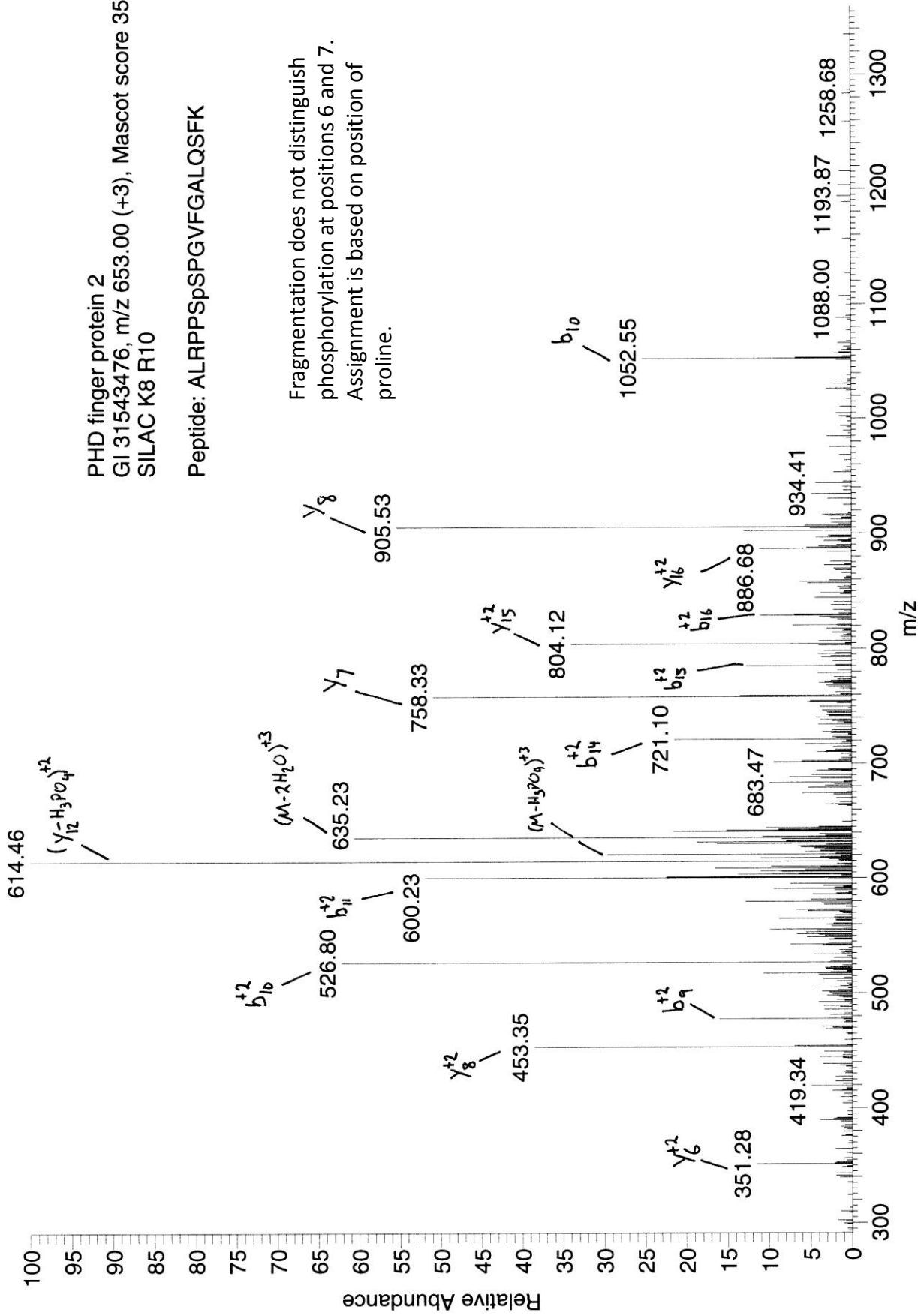
Peptide: EGSVLDILKpTPGFASPK

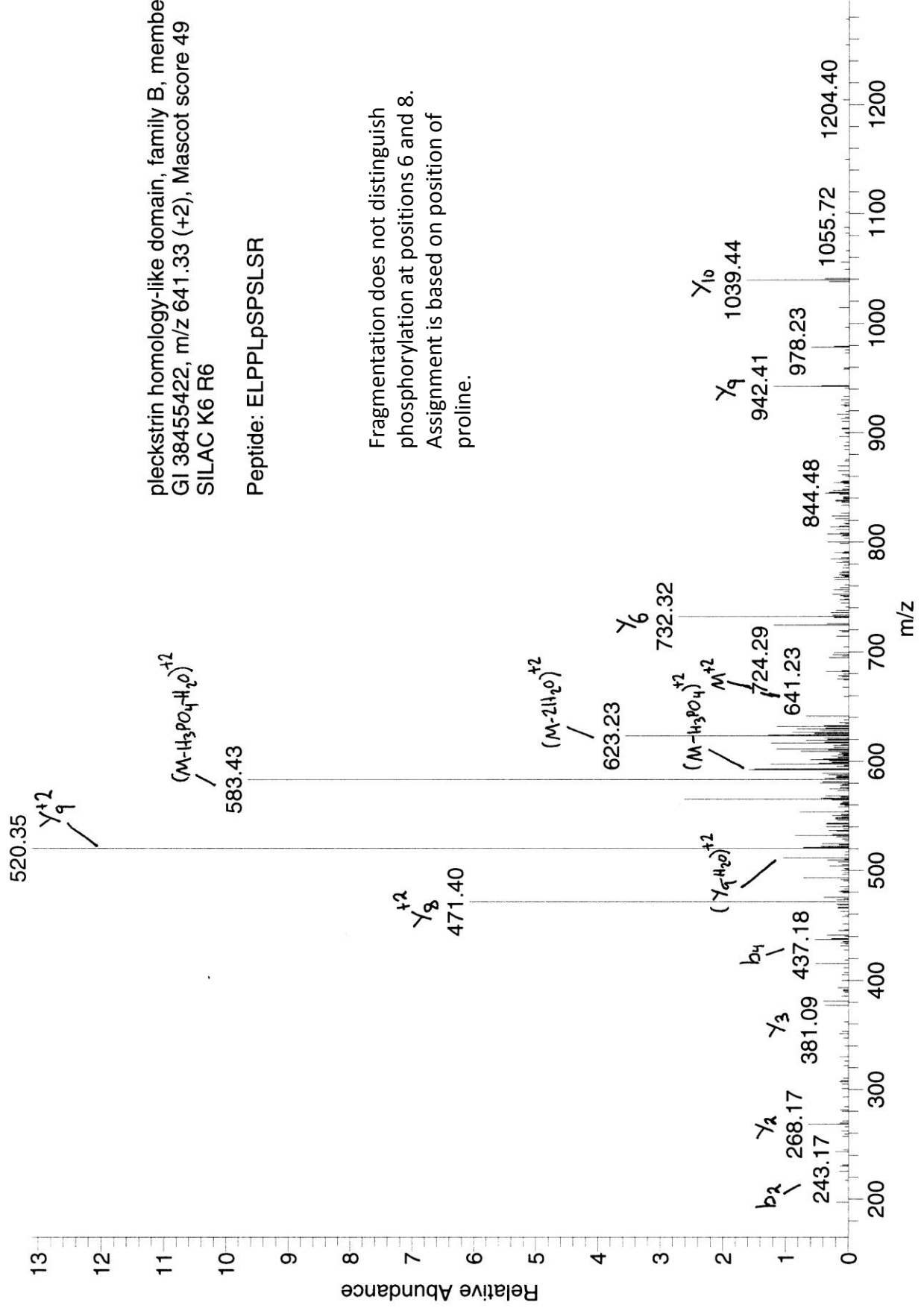


PHD finger protein 2
GI 31543476, m/z 653.00 (+3), Mascot score 35
SILAC K8 R10

Peptide: ALRPPSpSPGVFGALQSFK

Fragmentation does not distinguish phosphorylation at positions 6 and 7. Assignment is based on position of proline.

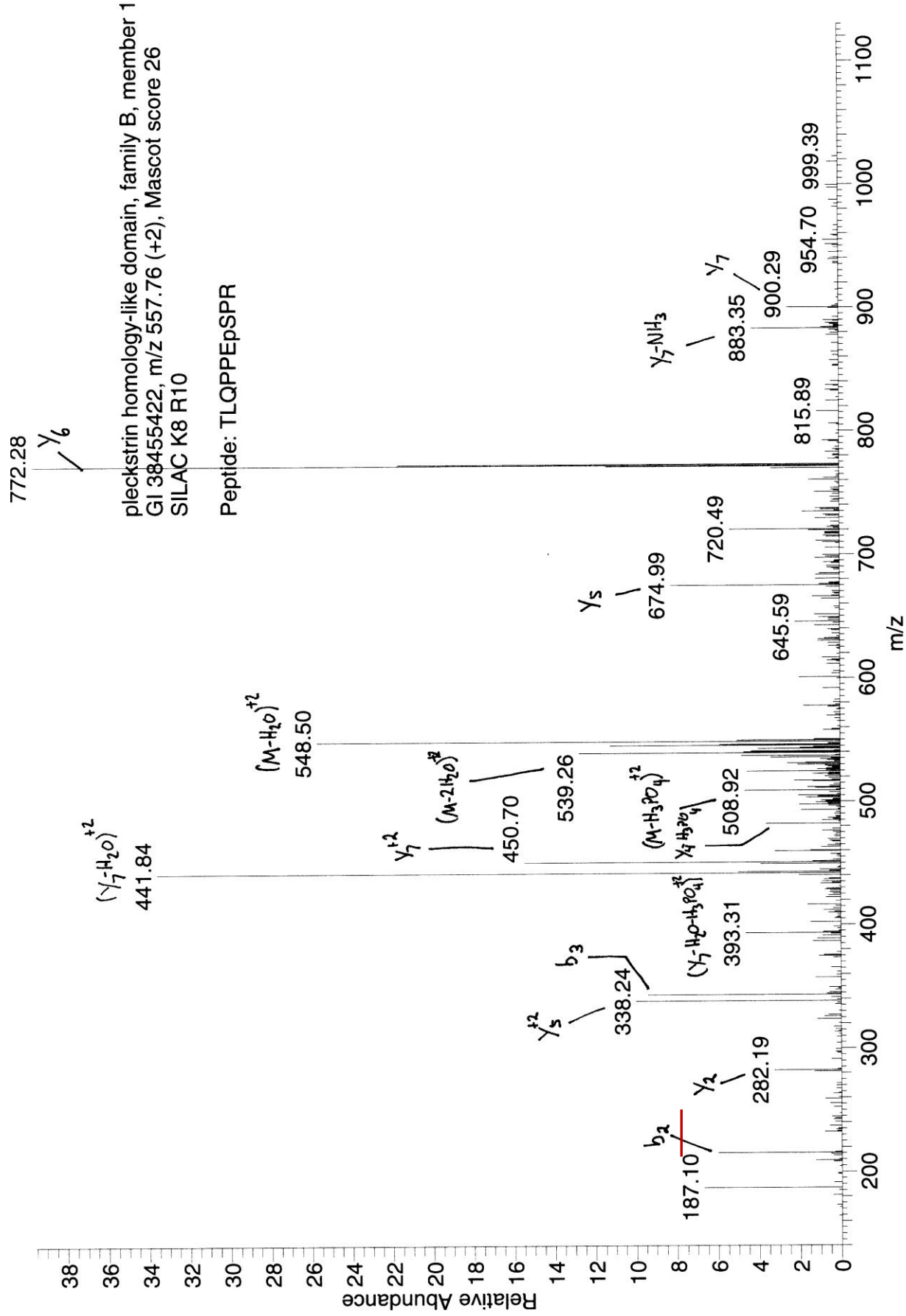




pleckstrin homology-like domain, family B, member 1
 GI 38455422, m/z 641.33 (+2), Mascot score 49
 SILAC K6 R6

Peptide: ELPPLpSPSLSR

Fragmentation does not distinguish
 phosphorylation at positions 6 and 8.
 Assignment is based on position of
 proline.



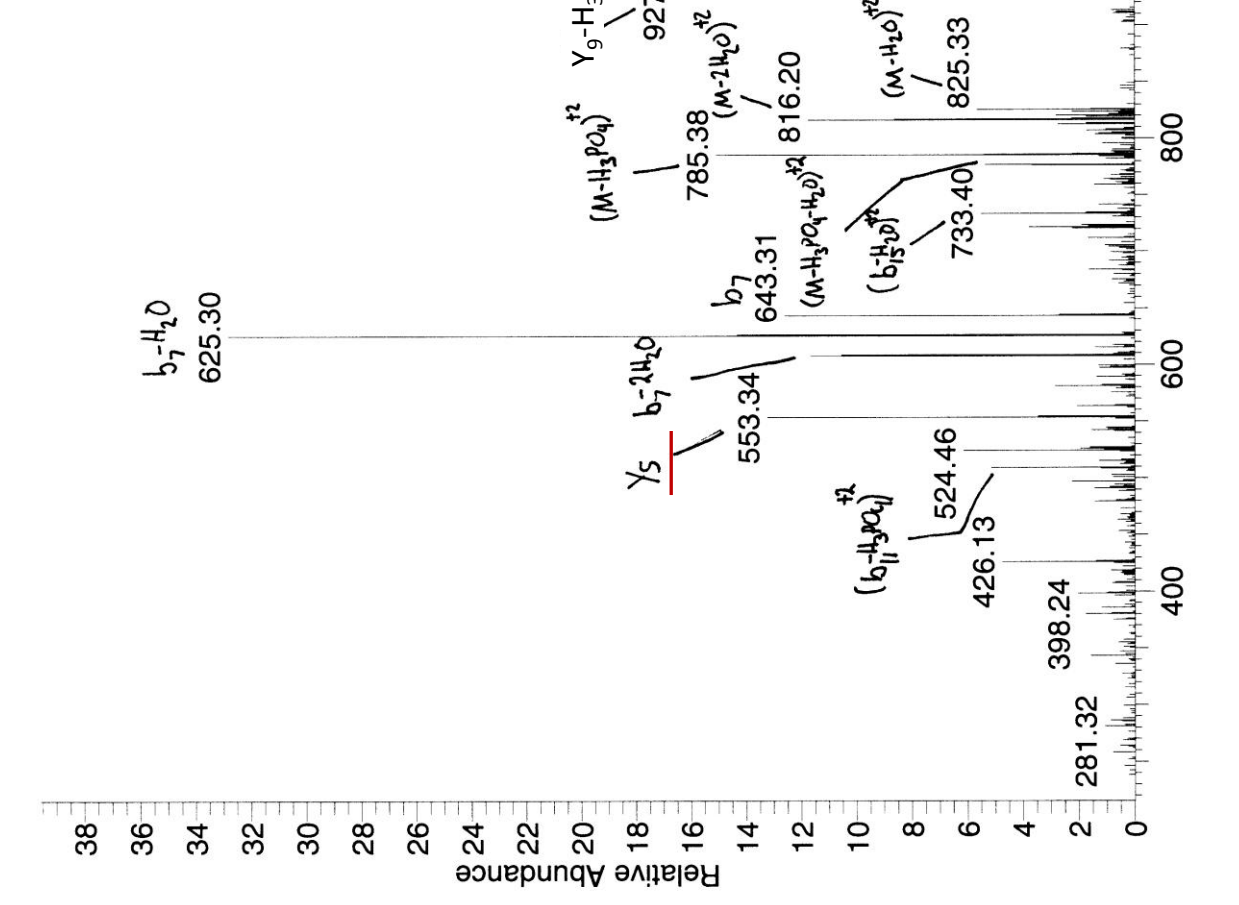
pleckstrin homology-like domain, family B, member 1
 GI 38455422, m/z 557.76 (+2), Mascot score 26
 SILAC K8 R10

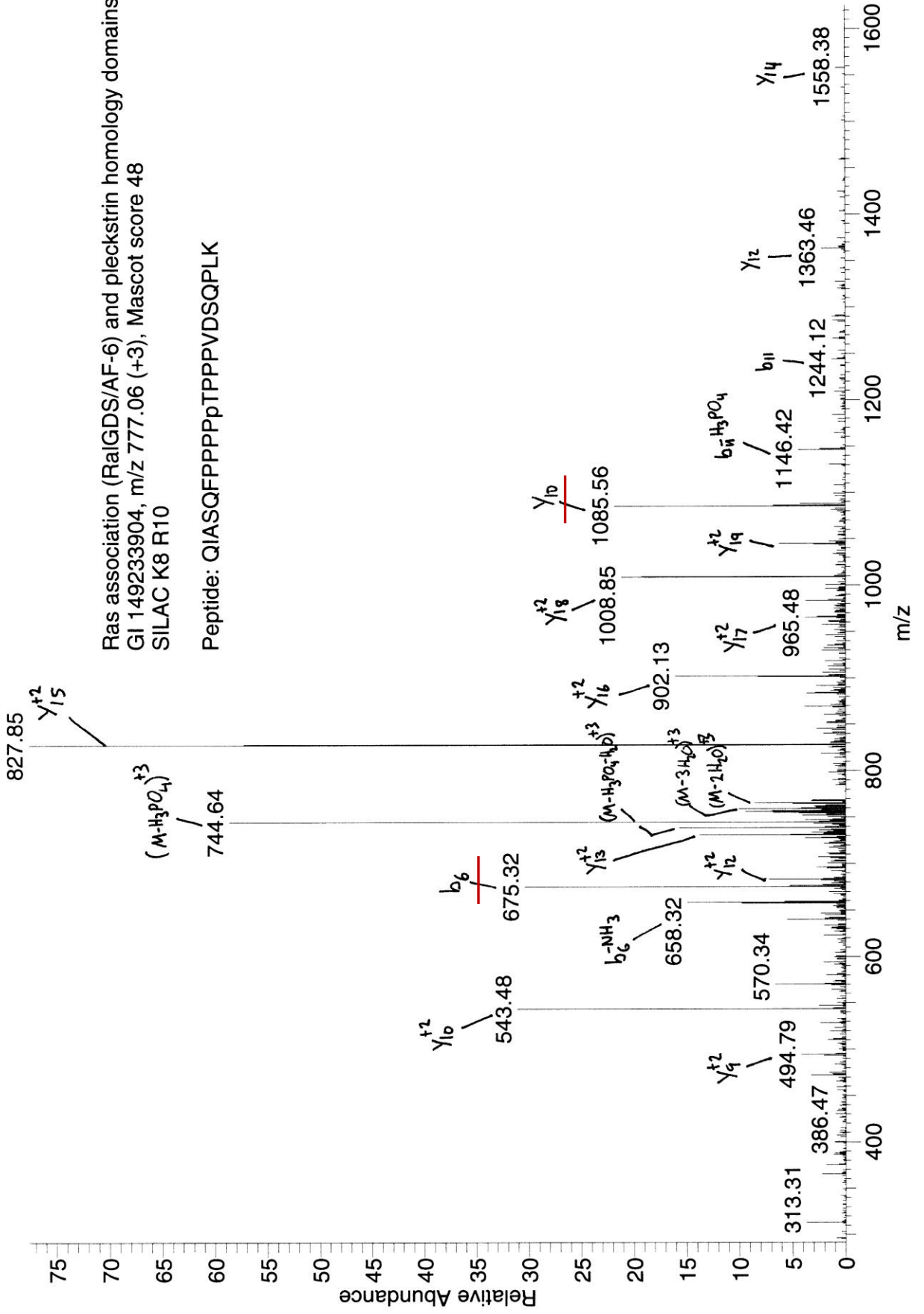
Peptide: TLQPPEsPR

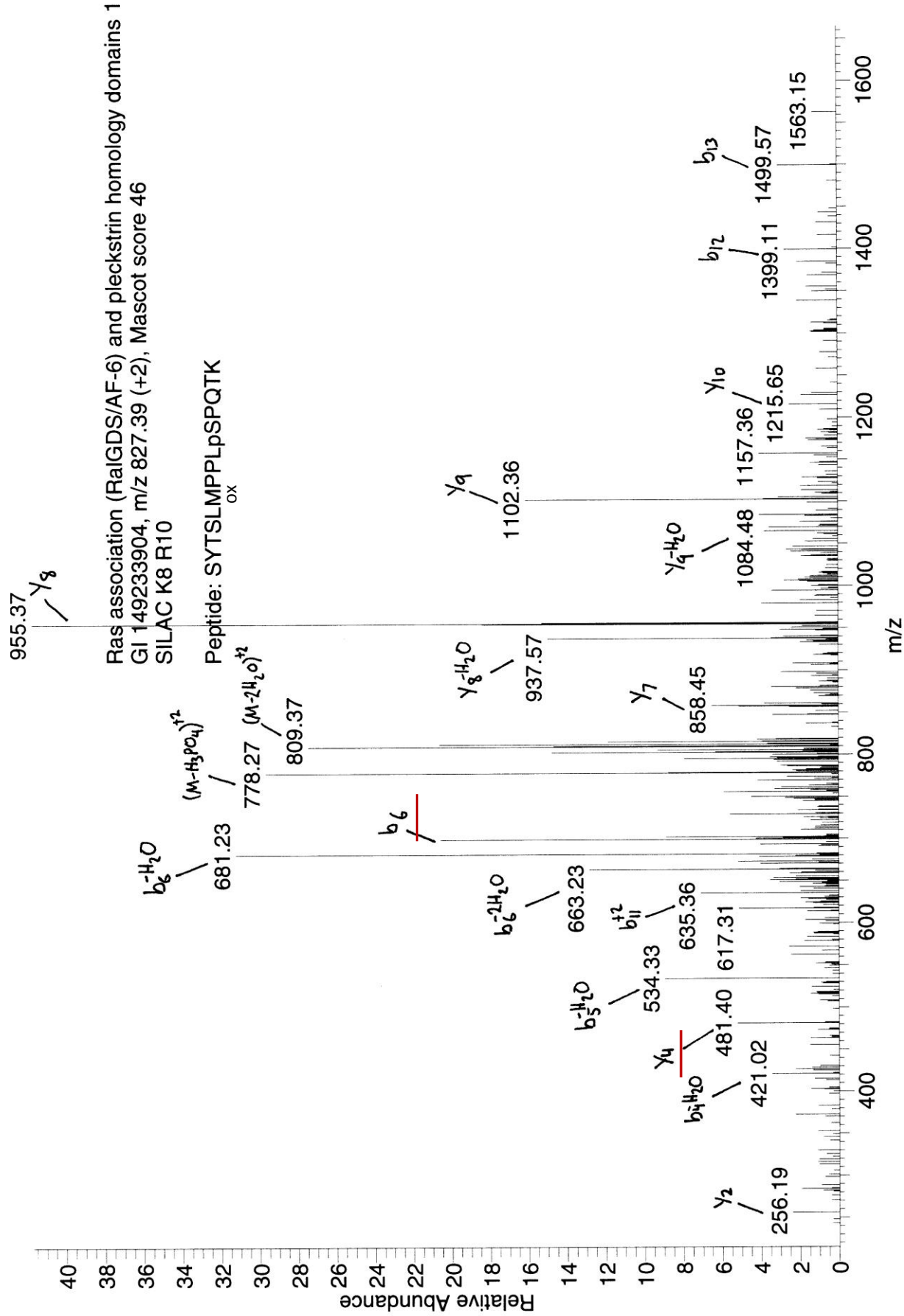
1025.43 γ_9

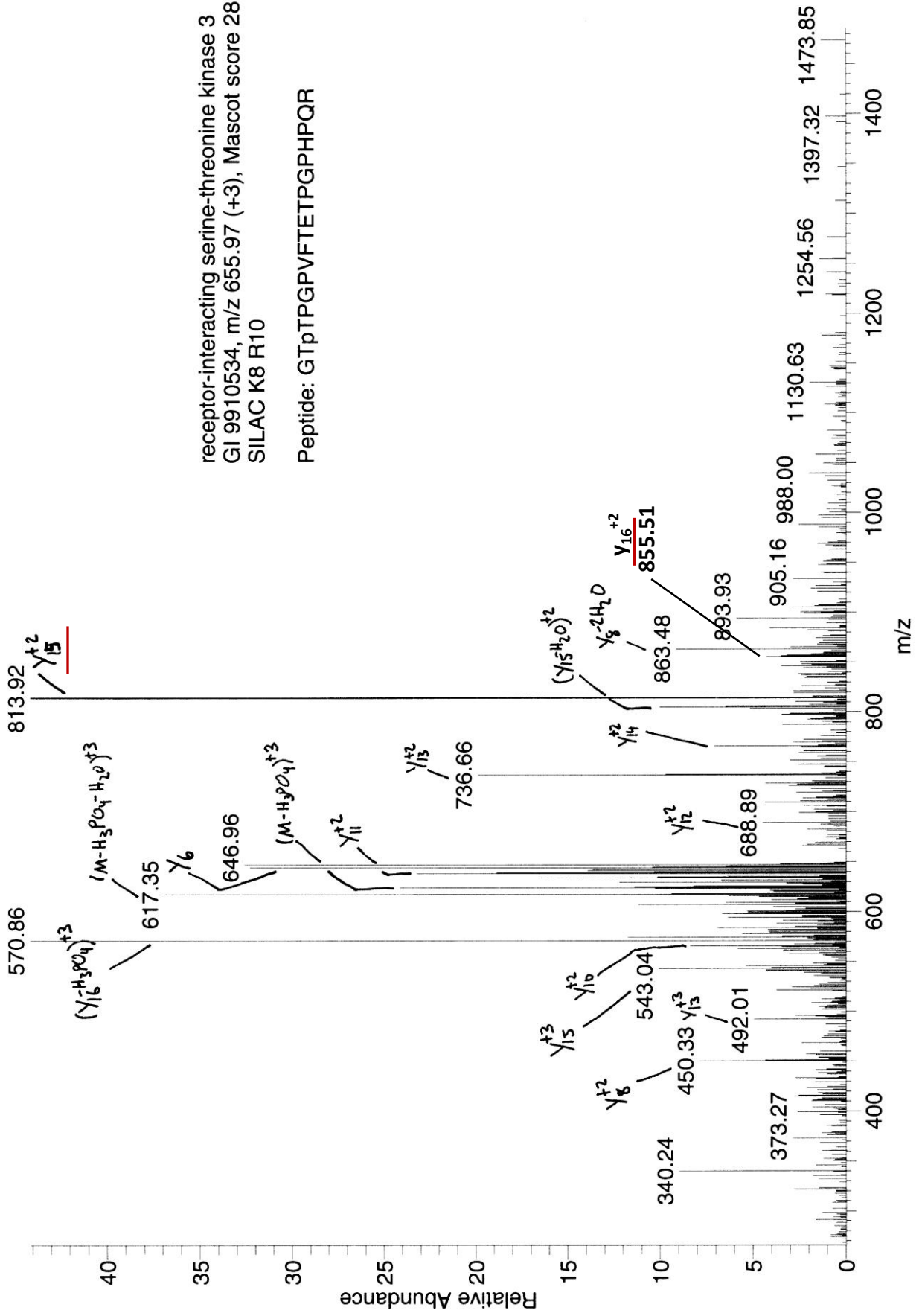
pyridoxal-dependent decarboxylase domain containing 1 isoform 1
 GI 88758582, m/z 834.42 (+2), Mascot score 76
 SILAC K8 R10

Peptide: VQGTGVTPPPpTPLGTR



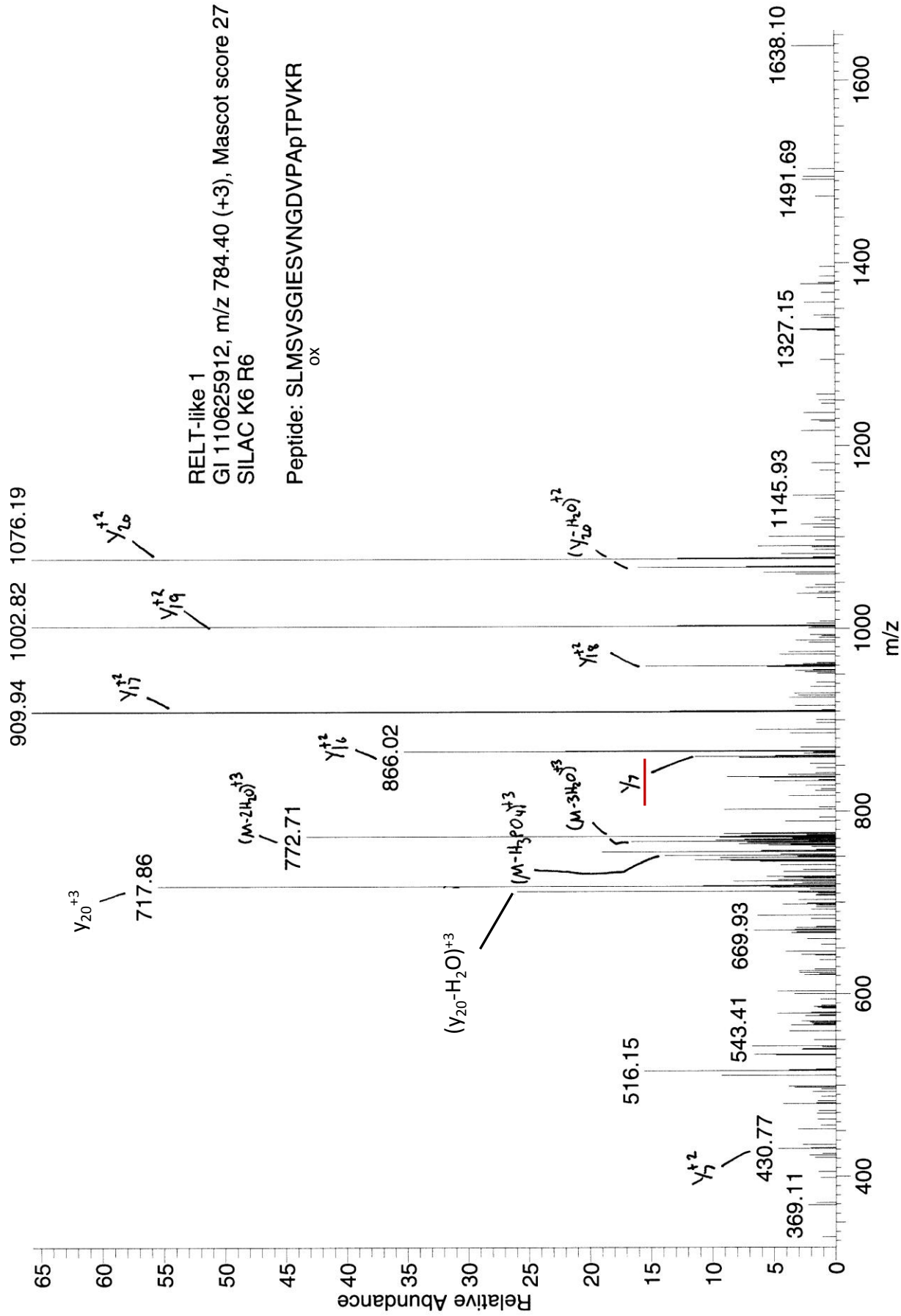






receptor-interacting serine-threonine kinase 3
 GI 9910534, m/z 655.97 (+3), Mascot score 28
 SILAC K8 R10

Peptide: GTpTPGPVFTETPGHPQR



1095.18 1214.66

reticulon 4 isoform B1
GI 34610233, m/z 1127.55 (+3), Mascot score 55
SILAC K8 R10

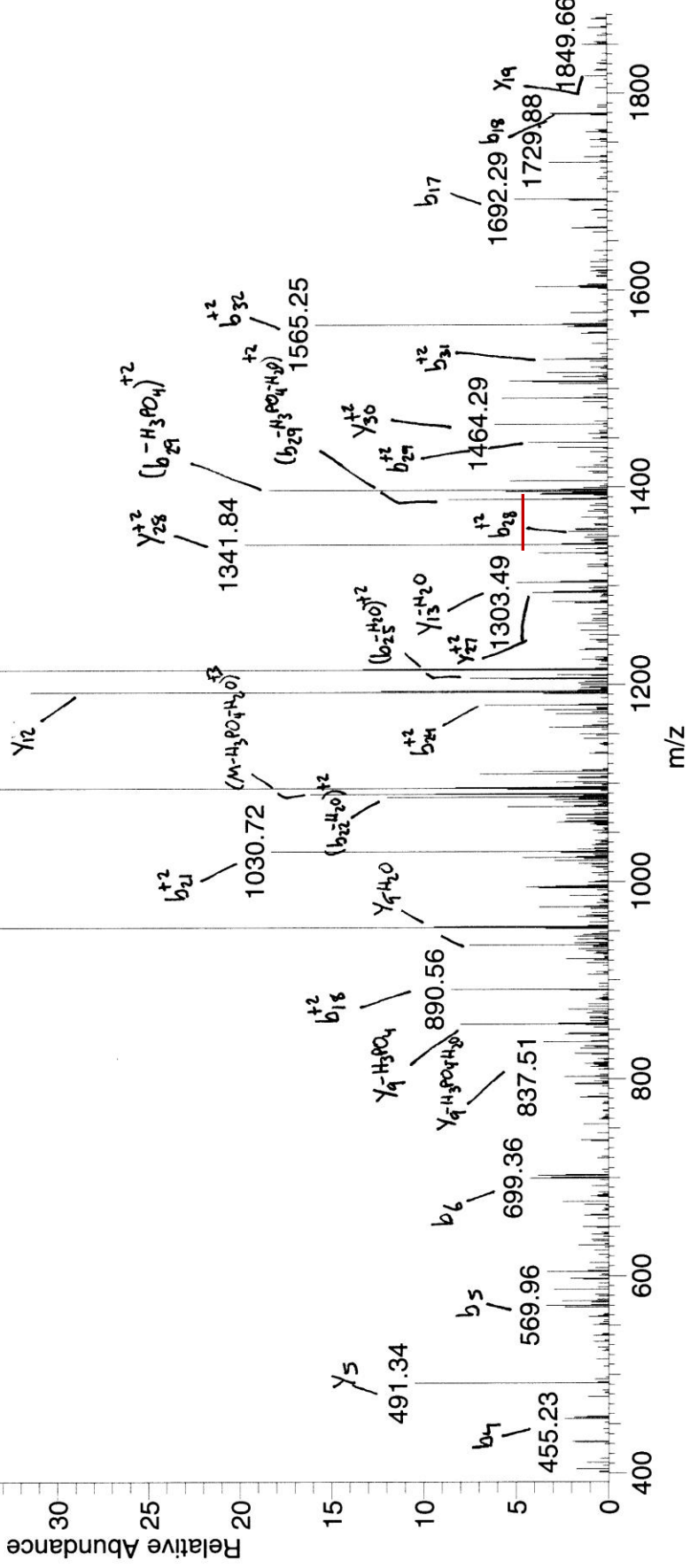
Peptide: LPEDDEPPARPPAPAGASPLAEPAPPSpTPAAPK

γ_9
953.47

γ_{11}/b_{22}^{+2}

b_{25}^{+2}

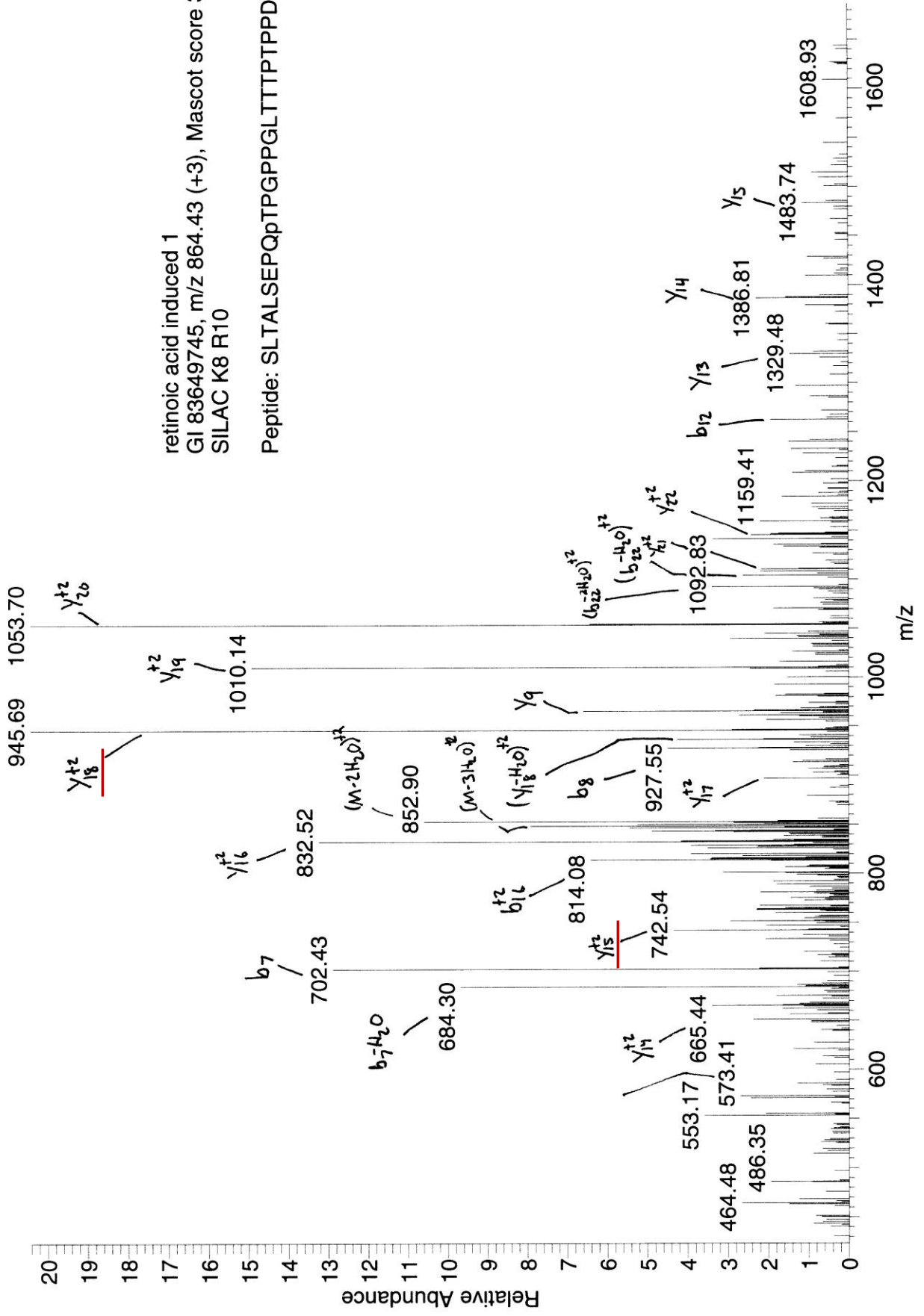
Relative Abundance



m/z

retinoic acid induced 1
GI 83649745, m/z 864.43 (+3), Mascot score 38
SILAC K8 R10

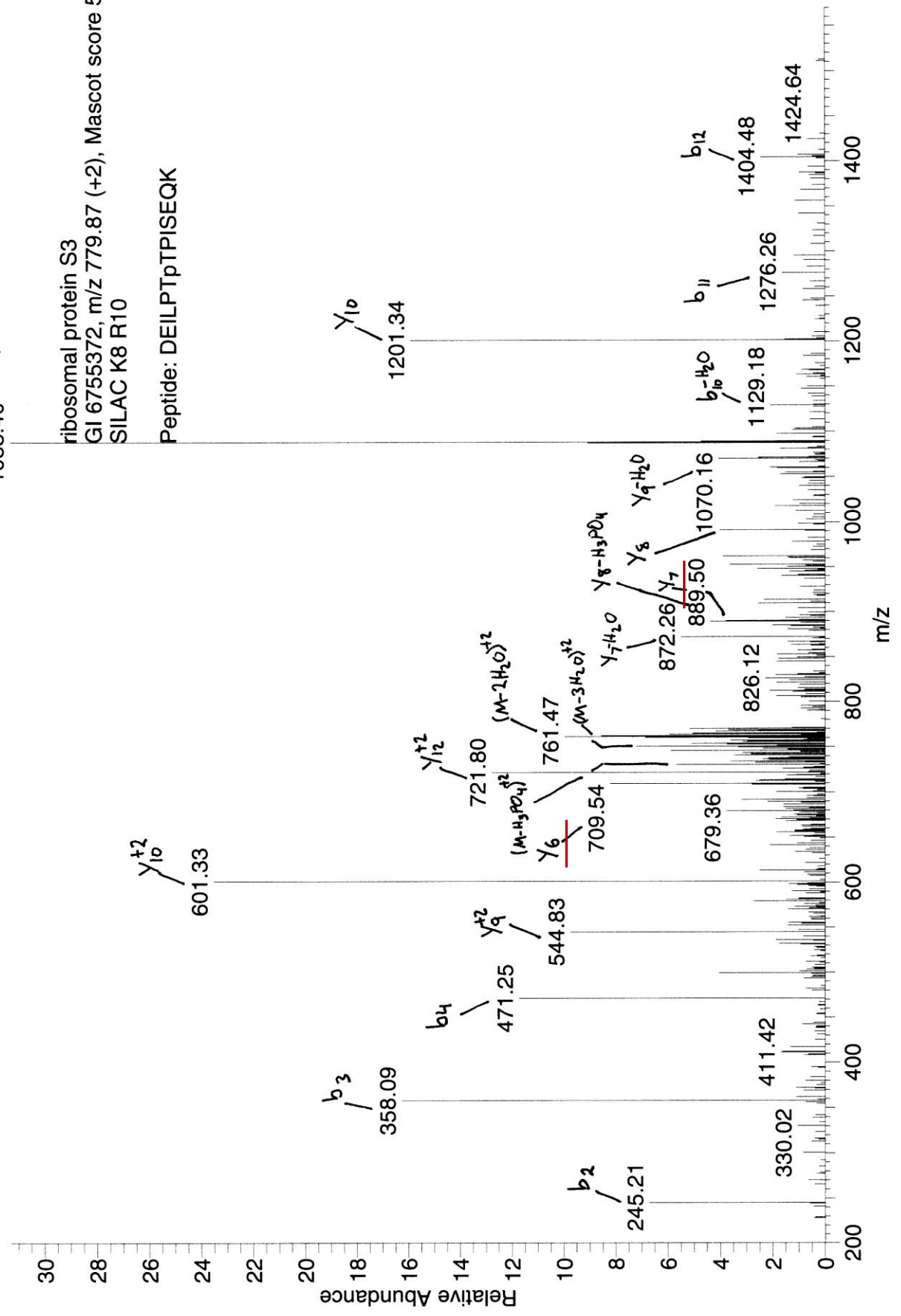
Peptide: SLTALSEPqTPGPPGLTTTPTPPDK

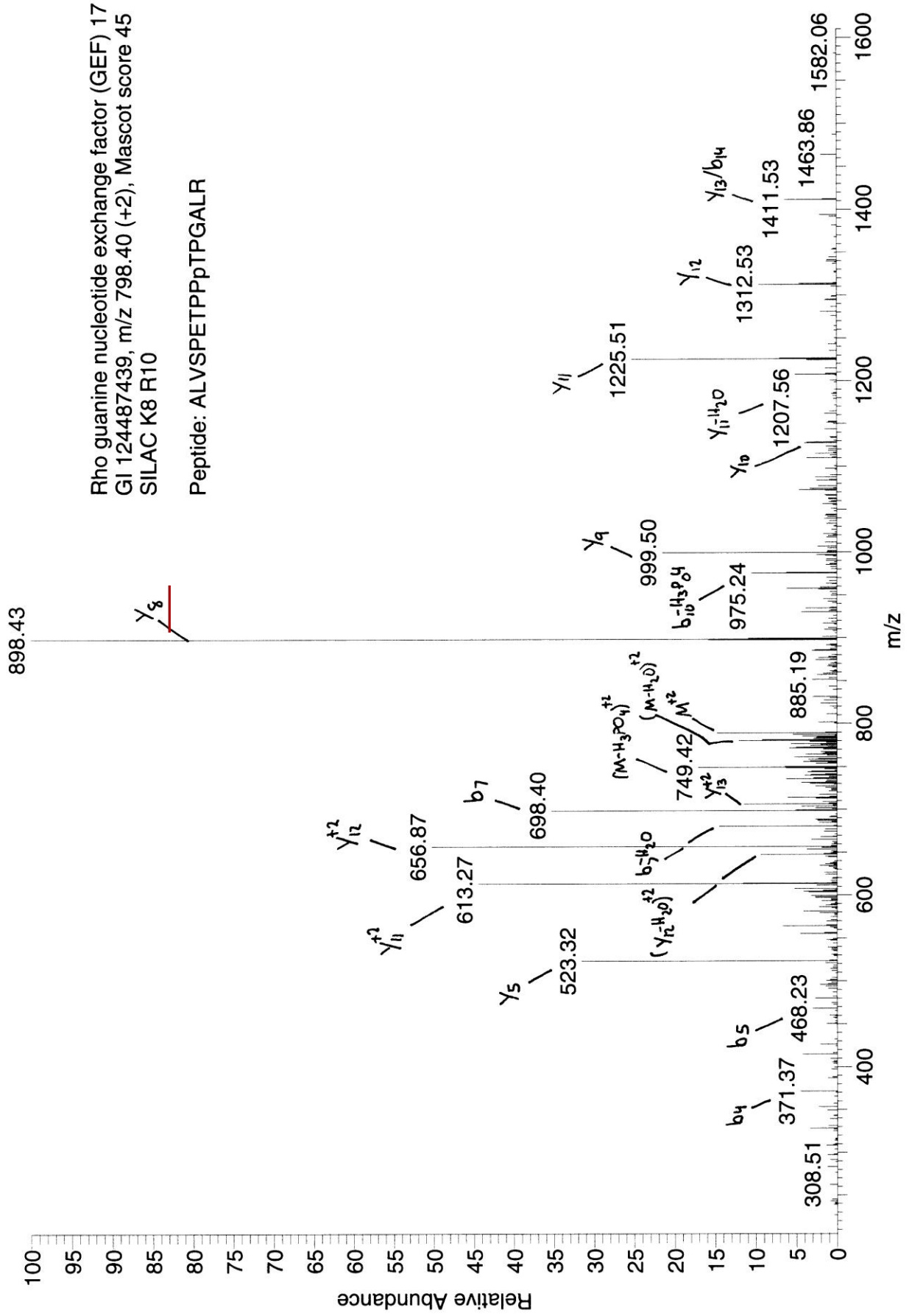


1088.40 γ_9

ribosomal protein S3
 GI 6755372, m/z 779.87 (+2), Mascot score 56
 SILAC K8 R10

Peptide: DEILPTpTPISEQK



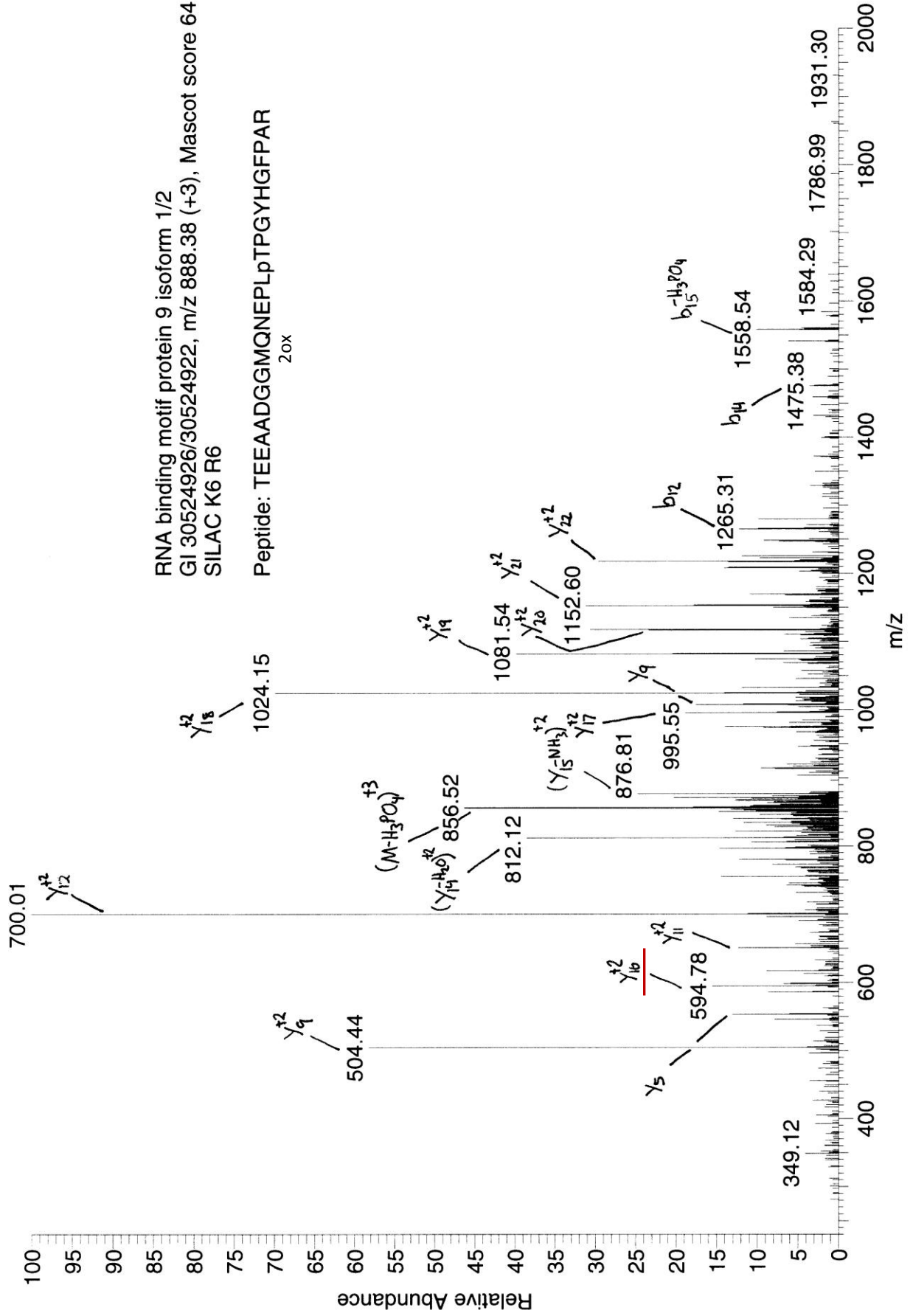


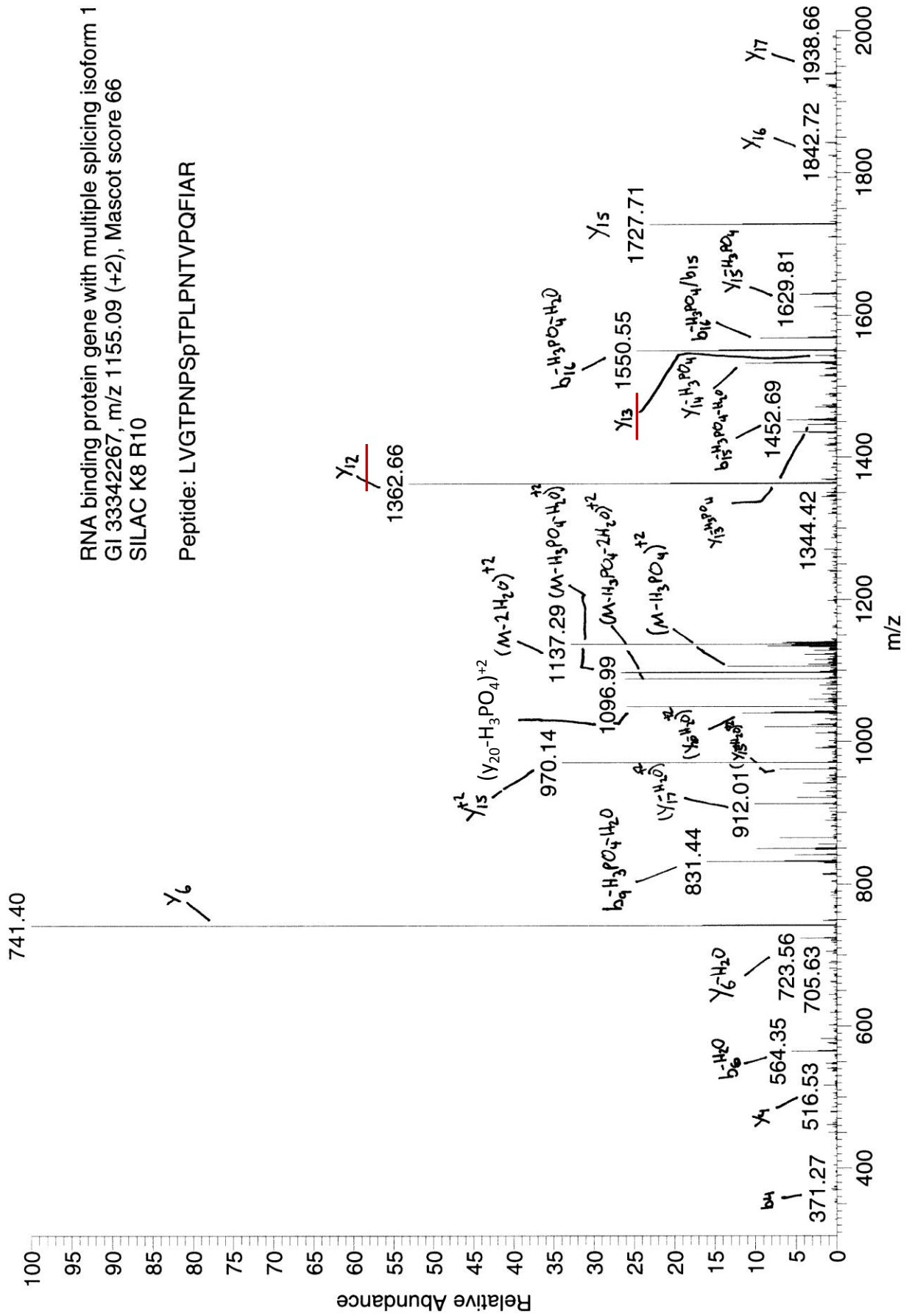
Rho guanine nucleotide exchange factor (GEF) 17
 GI 124487439, m/z 798.40 (+2), Mascot score 45
 SILAC K8 R10

Peptide: ALVSPETPPpTPGALR

RNA binding motif protein 9 isoform 1/2
GI 30524926/30524922, m/z 888.38 (+3), Mascot score 64
SILAC K6 R6

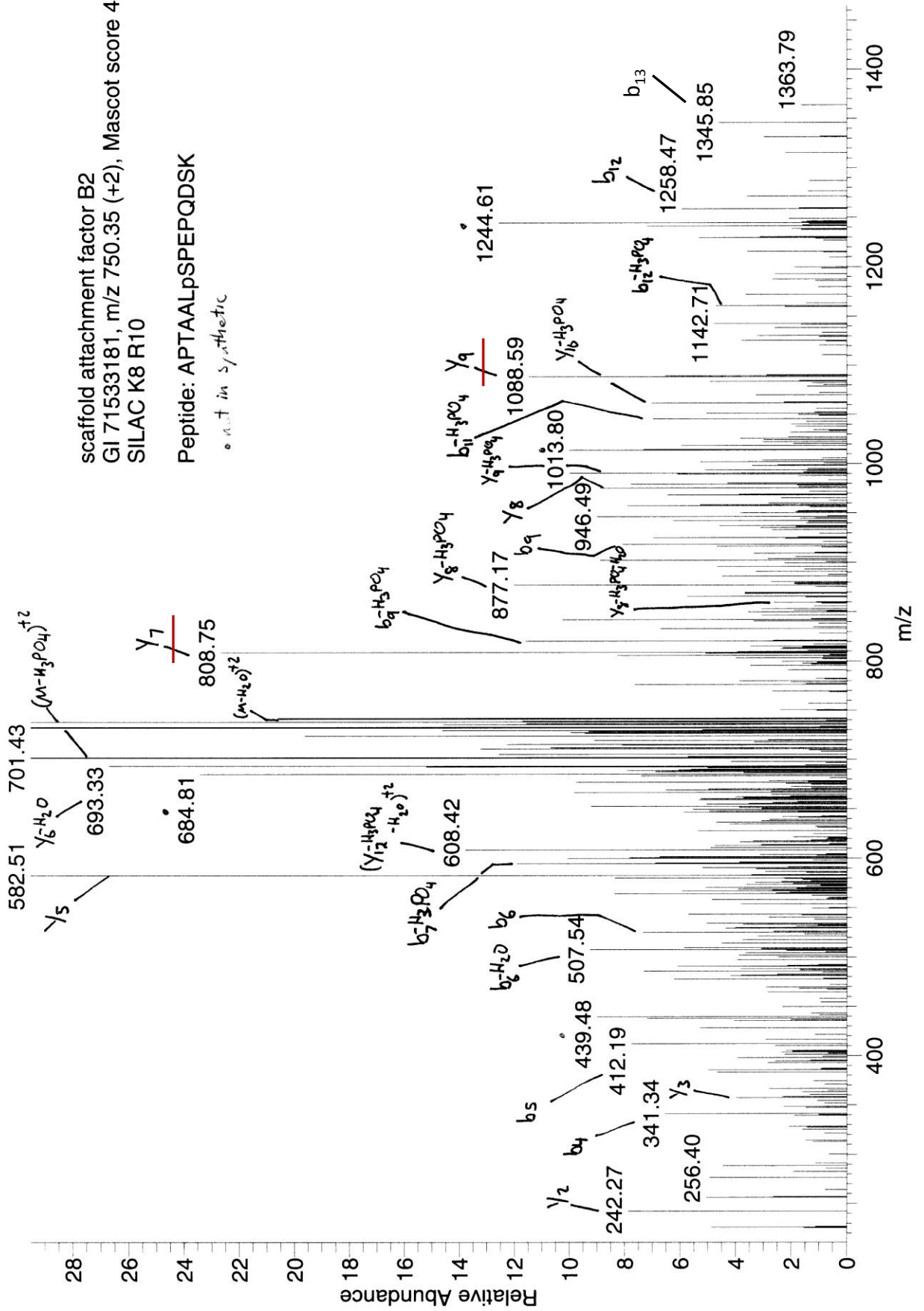
Peptide: TEEAADGGGMQNEPLpTPGYHGFPAR
2ox





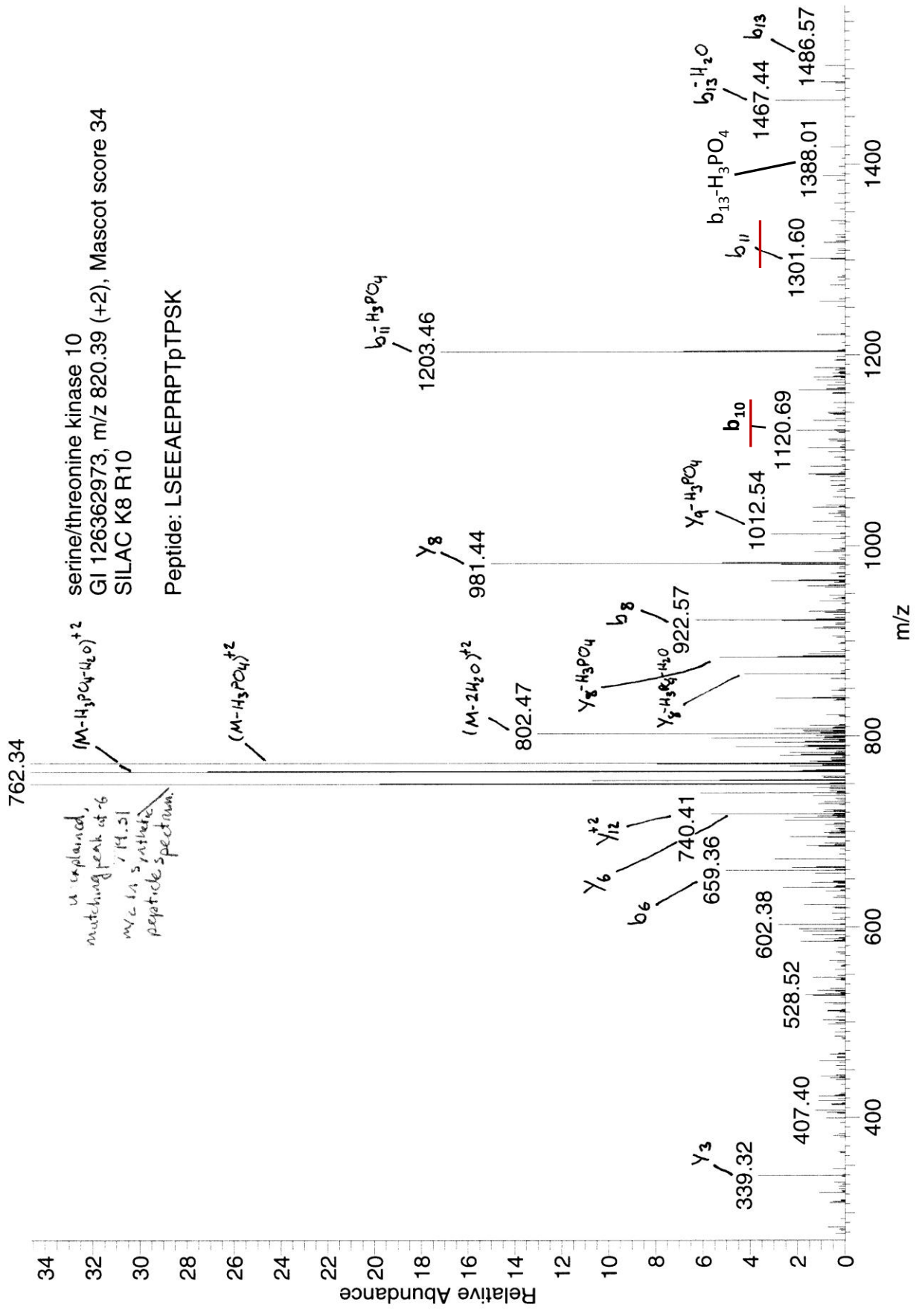
RNA binding protein gene with multiple splicing isoform 1
 GI 33342267, m/z 1155.09 (+2), Mascot score 66
 SILAC K8 R10

Peptide: LVGTPNPSpTLPNTVPQFIAR



scaffold attachment factor B2
 GI 71533181, m/z 750.35 (+2), Mascot score 48
 SILAC K8 R10

Peptide: APTAALpSPEPQDSK
not in synthetic



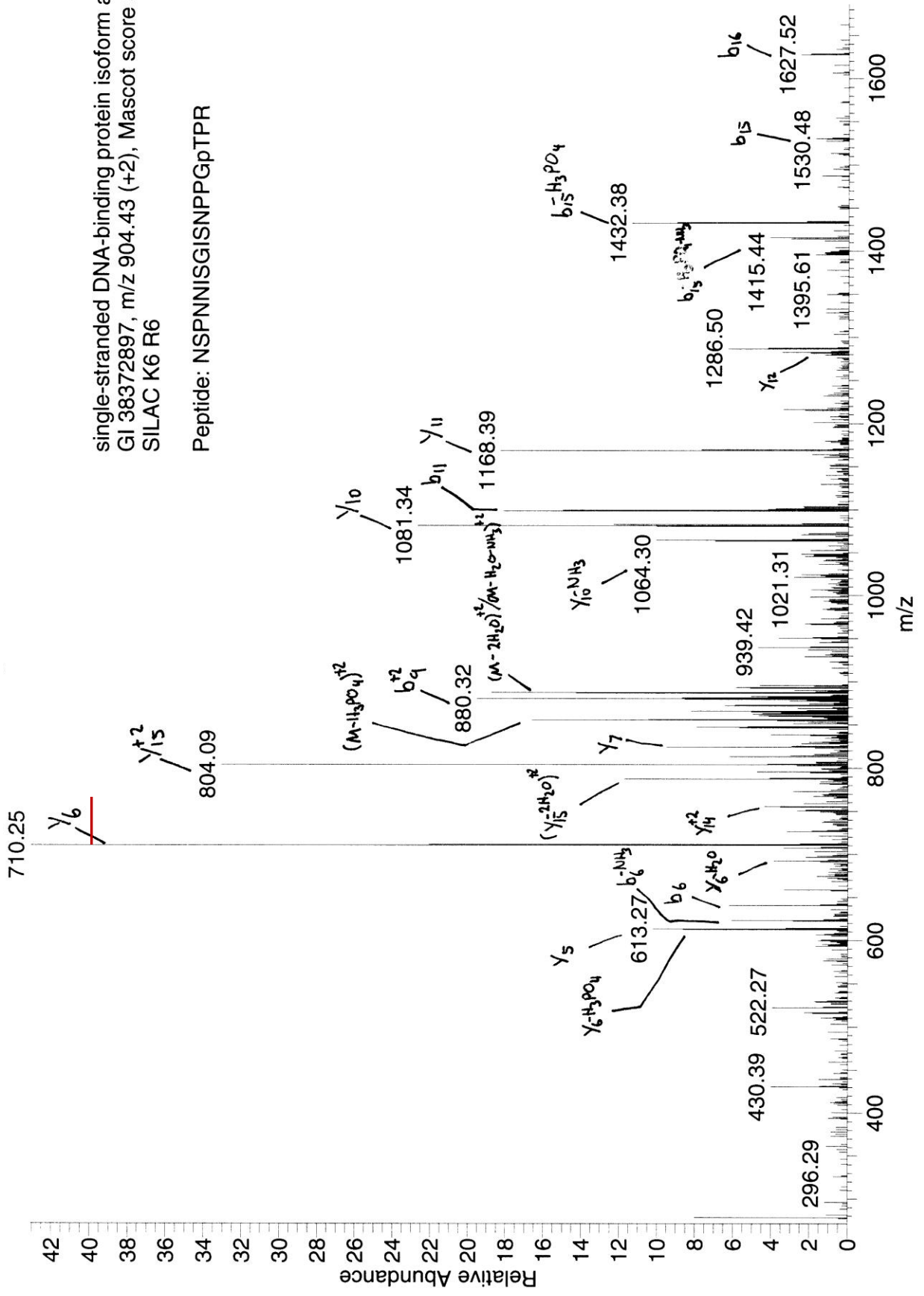
serine/threonine kinase 10
 GI 126362973, m/z 820.39 (+2), Mascot score 34
 SILAC K8 R10

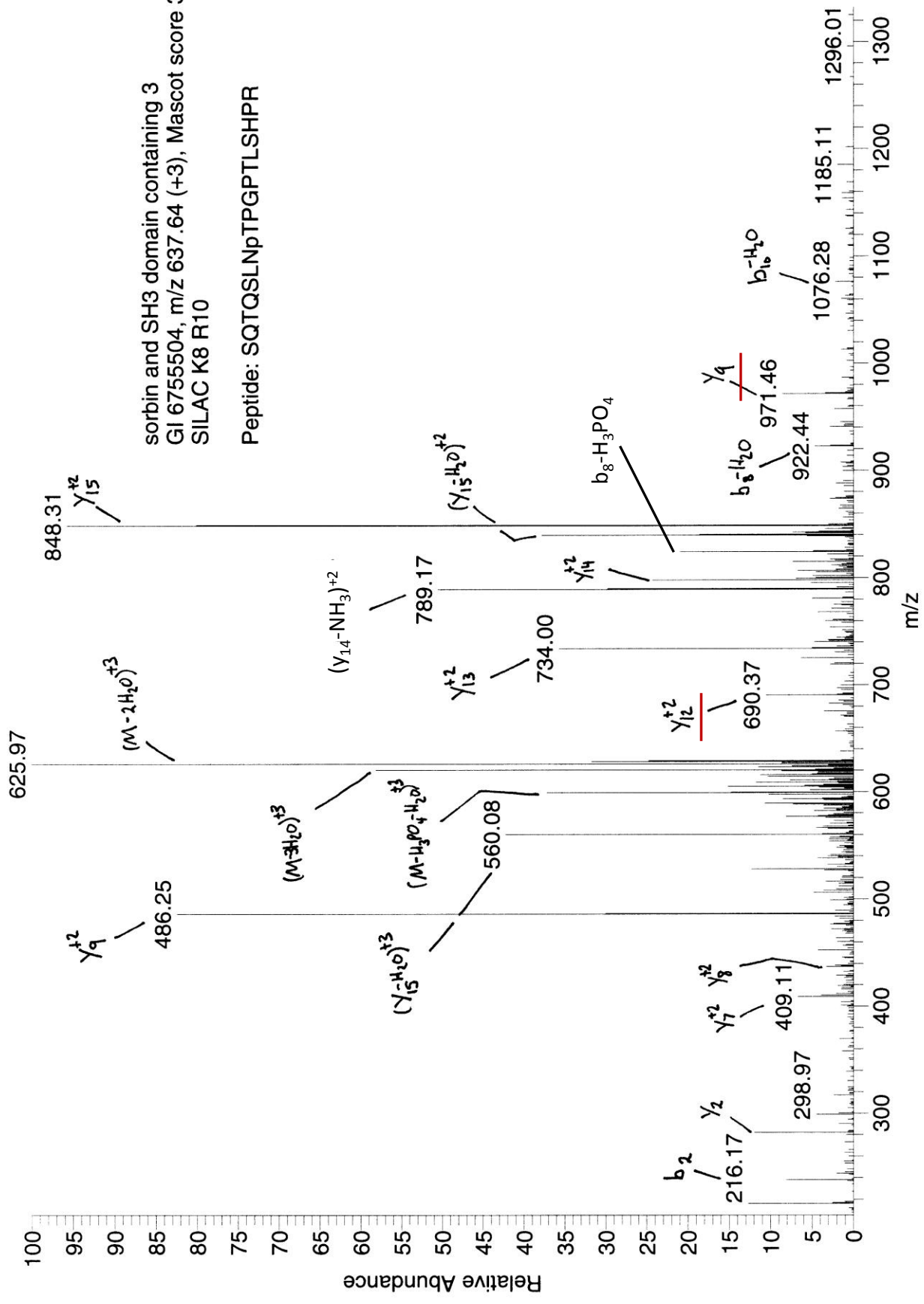
Peptide: LSEEAERPRTPPSK

*u explained,
 matching peak at -6
 m/z in 5th iterative
 peptide spectrum.*

single-stranded DNA-binding protein isoform a
 GI 38372897, m/z 904.43 (+2), Mascot score 54
 SILAC K6 R6

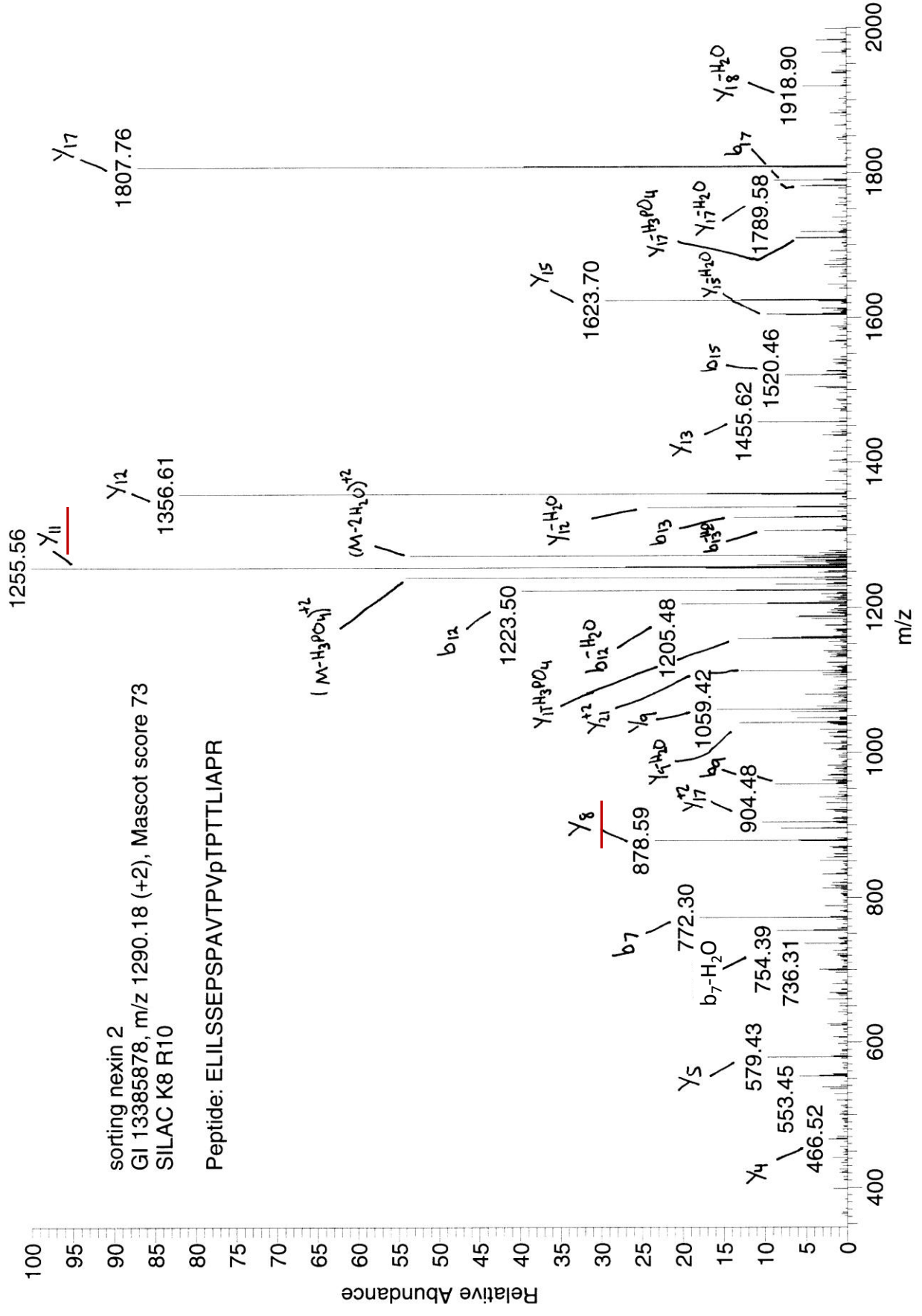
Peptide: NSPNNISGISNPPGpTPR





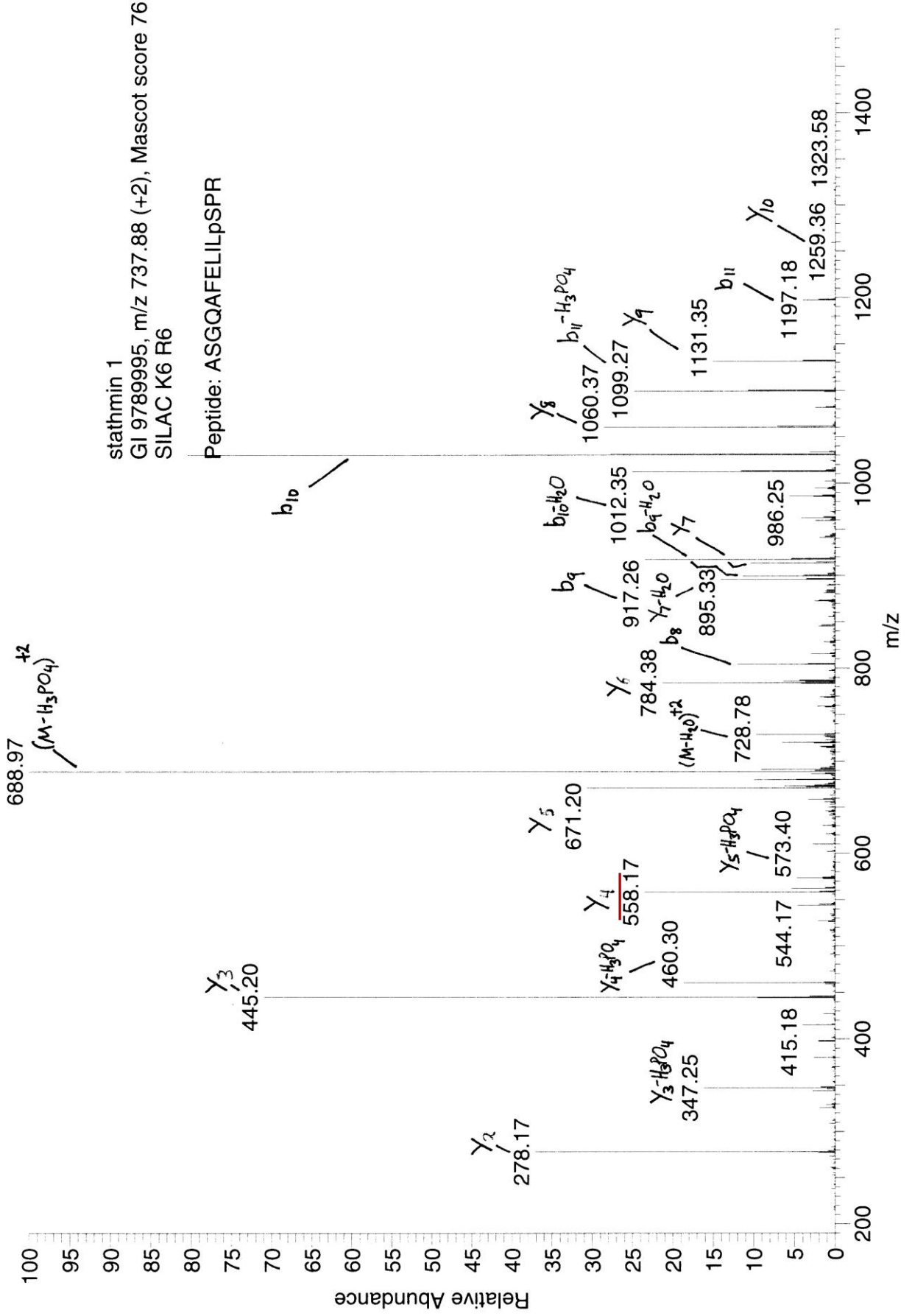
sorbin and SH3 domain containing 3
 GI 6755504, m/z 637.64 (+3), Mascot score 35
 SILAC K8 R10

Peptide: SQTQSLNpTPGPTLSHPR



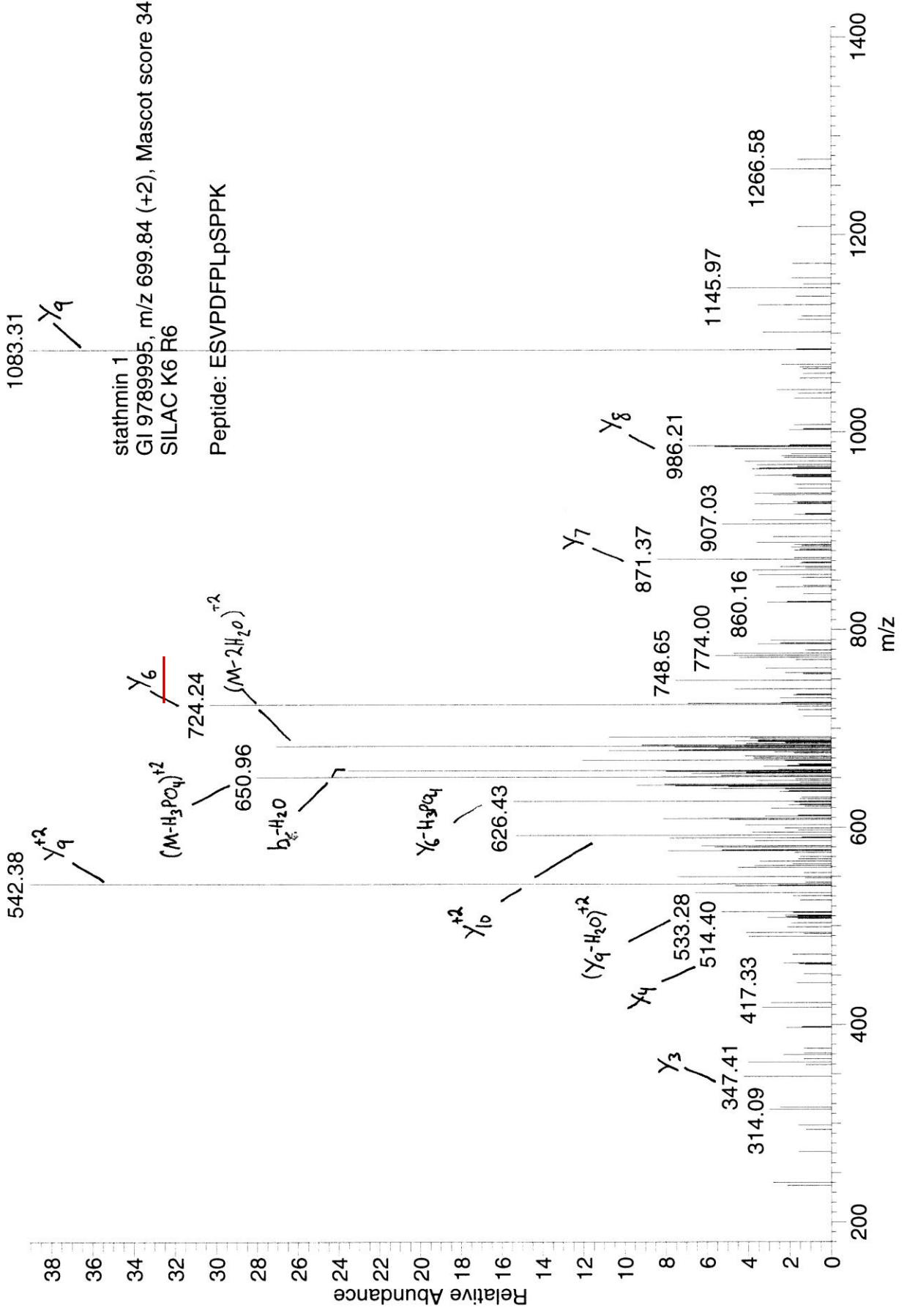
sorting nexin 2
 GI 13385878, m/z 1290.18 (+2), Mascot score 73
 SILAC K8 R10

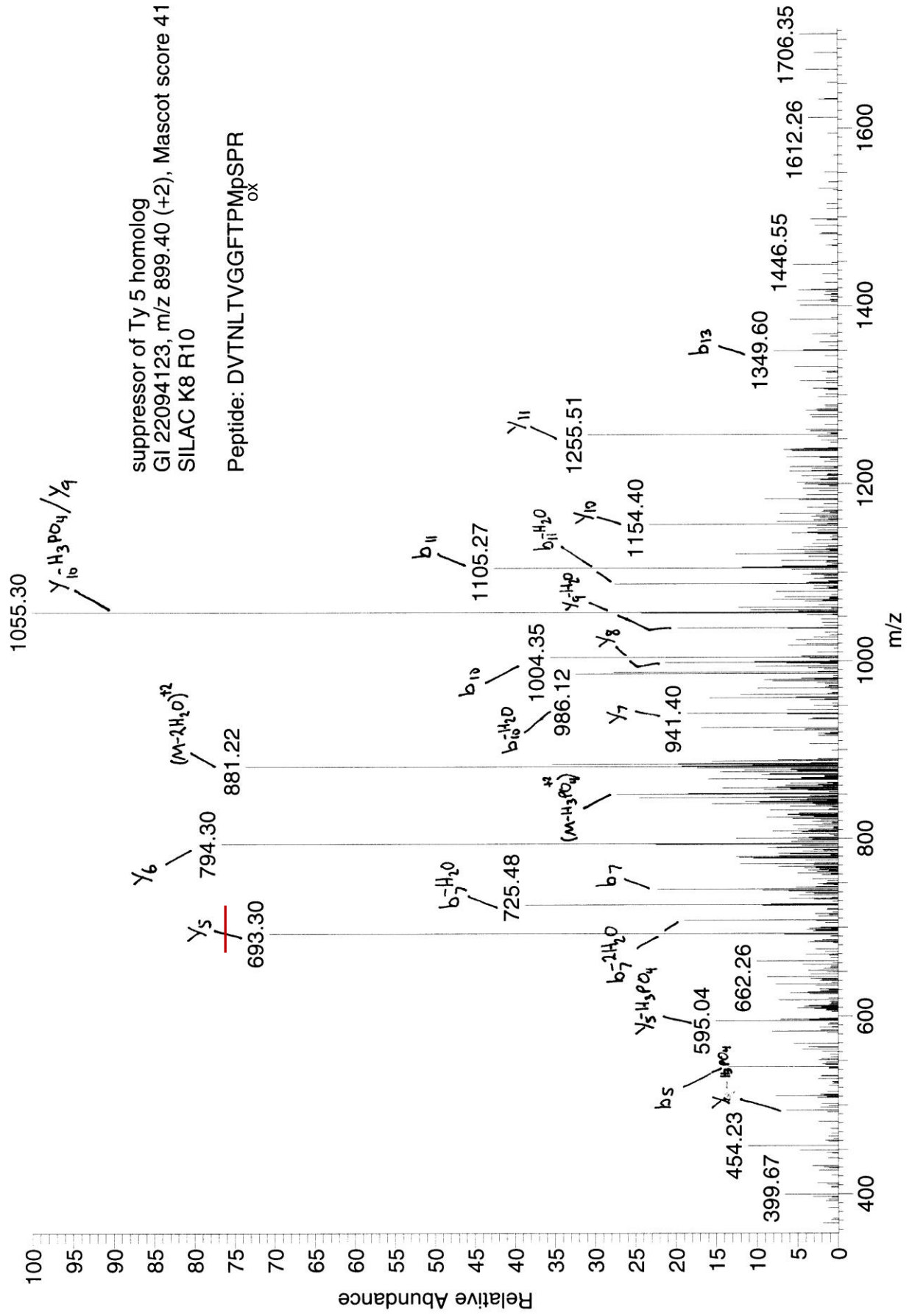
Peptide: ELILSSEPAVTPVpTPPTTLIAPR



stathmin 1
 GI 9789995, m/z 737.88 (+2), Mascot score 76
 SILAC K6 R6

Peptide: ASGQAFELILpSPR



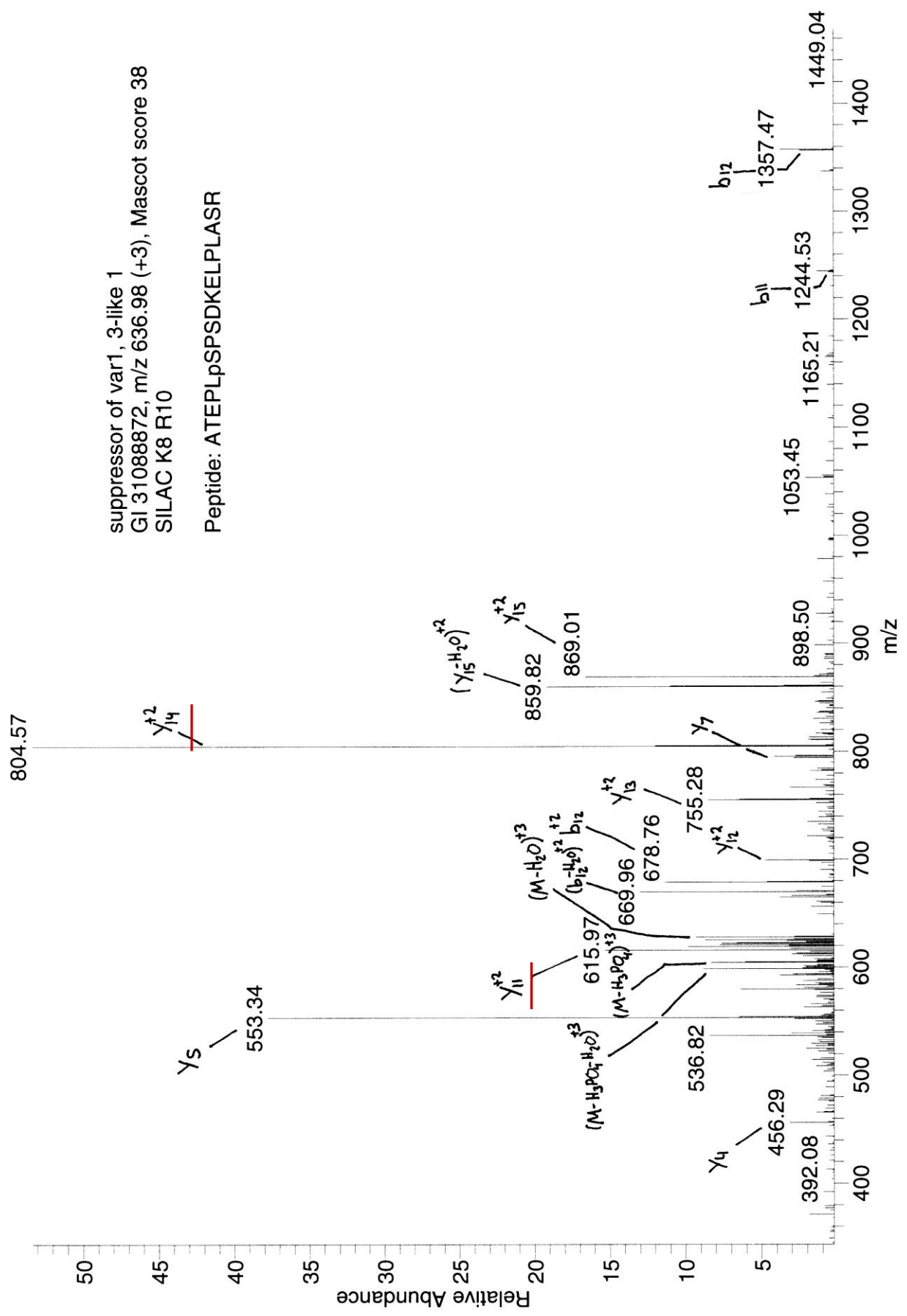


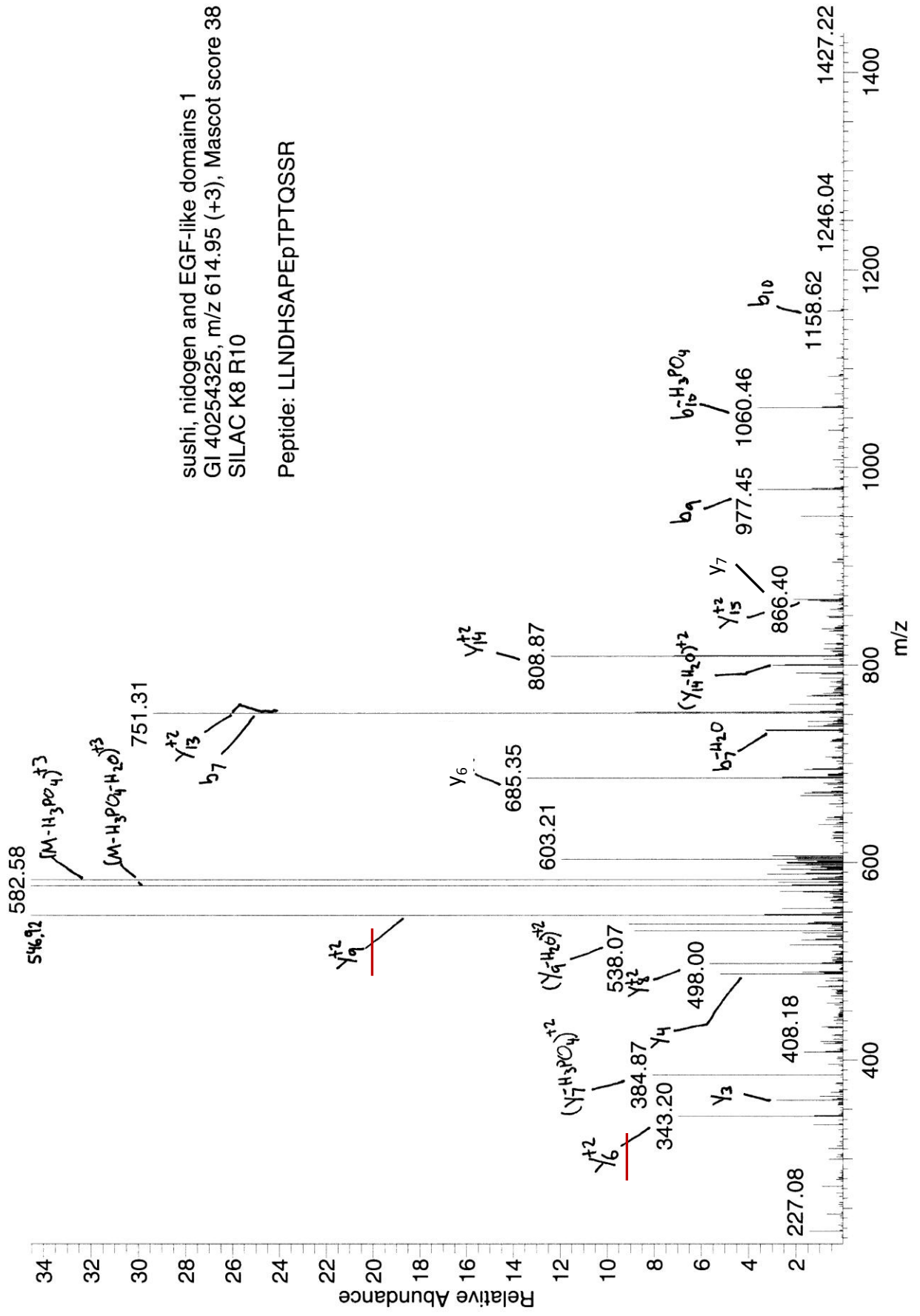
suppressor of Ty 5 homolog
 GI 22094123, m/z 899.40 (+2), Mascot score 41
 SILAC K8 R10

Peptide: DVTNLTVGGFTPMpSPR_{ox}

suppressor of var1, 3-like 1
GI 31088872, m/z 636.98 (+3), Mascot score 38
SILAC K8 R10

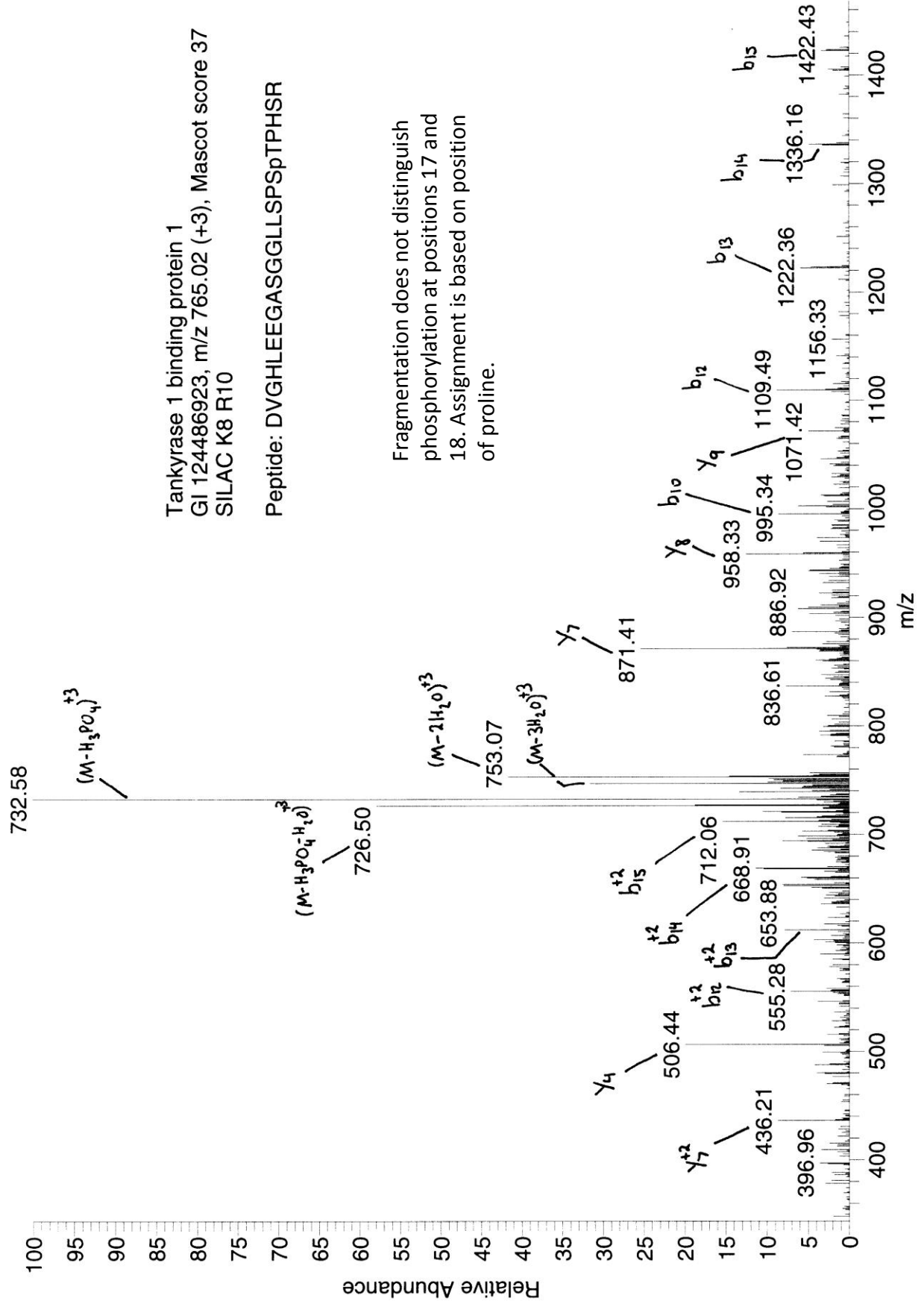
Peptide: ATEPLpSPSDKELPLASR





sushi, nidogen and EGF-like domains 1
 GI 40254325, m/z 614.95 (+3), Mascot score 38
 SILAC K8 R10

Peptide: LLNDHSAPEpTPTQSSR



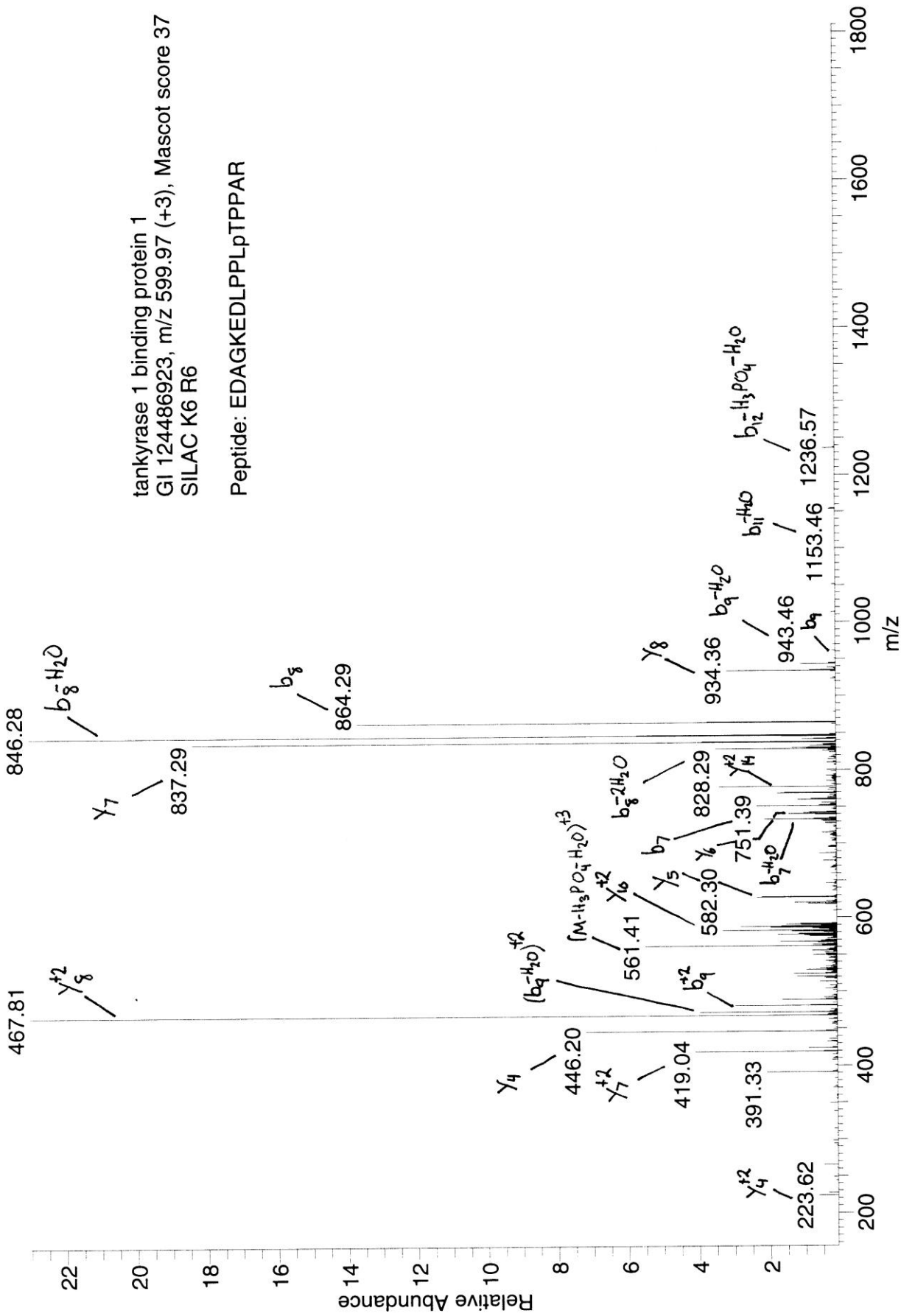
Tankyrase 1 binding protein 1
 GI 124486923, m/z 765.02 (+3), Mascot score 37
 SILAC K8 R10

Peptide: DVGHLEEGASGGLLSPSPTPHSR

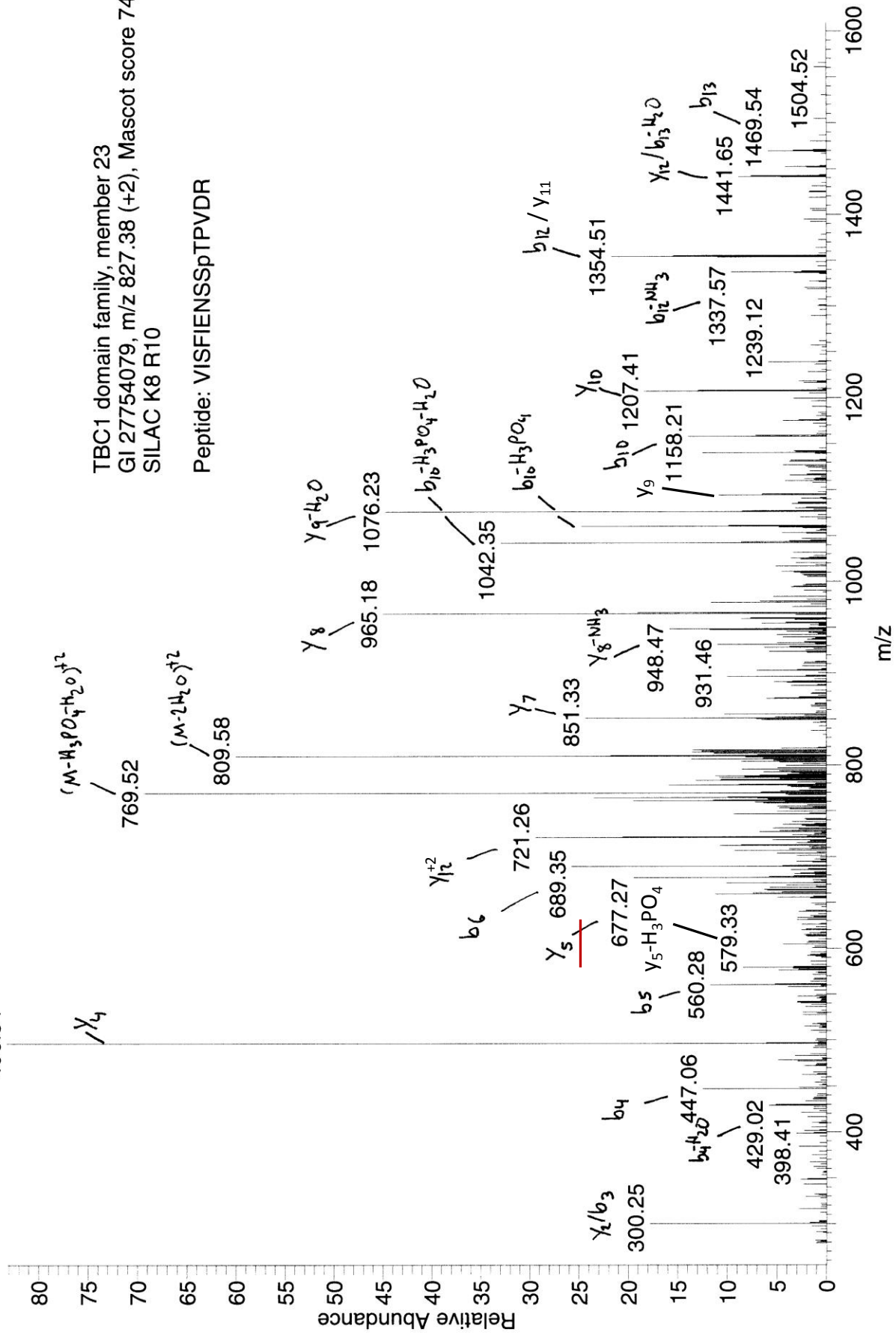
Fragmentation does not distinguish phosphorylation at positions 17 and 18. Assignment is based on position of proline.

tankyrase 1 binding protein 1
GI 124486923, m/z 599.97 (+3), Mascot score 37
SILAC K6 R6

Peptide: EDAGKEDLPLpTPPAR

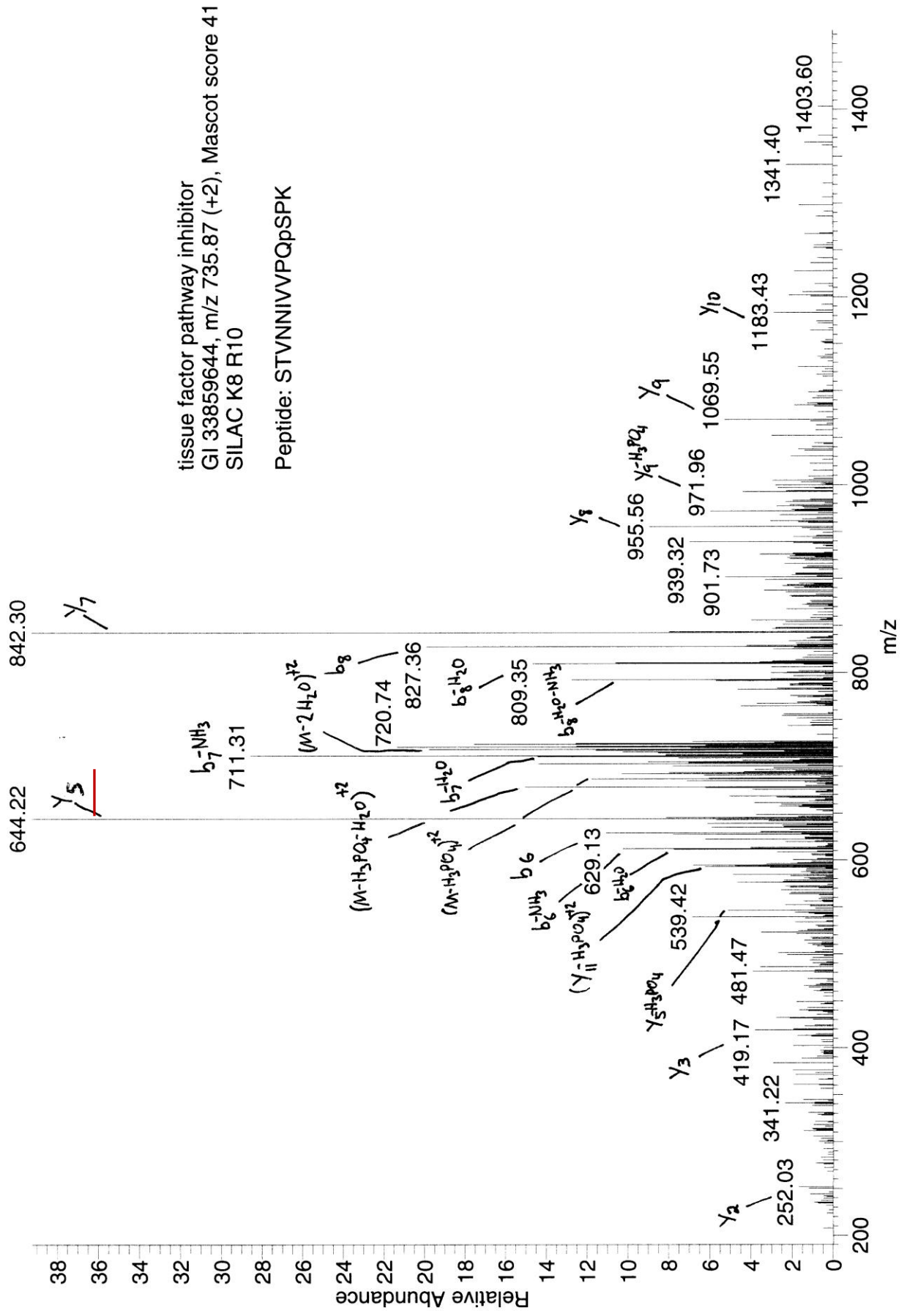


496.34



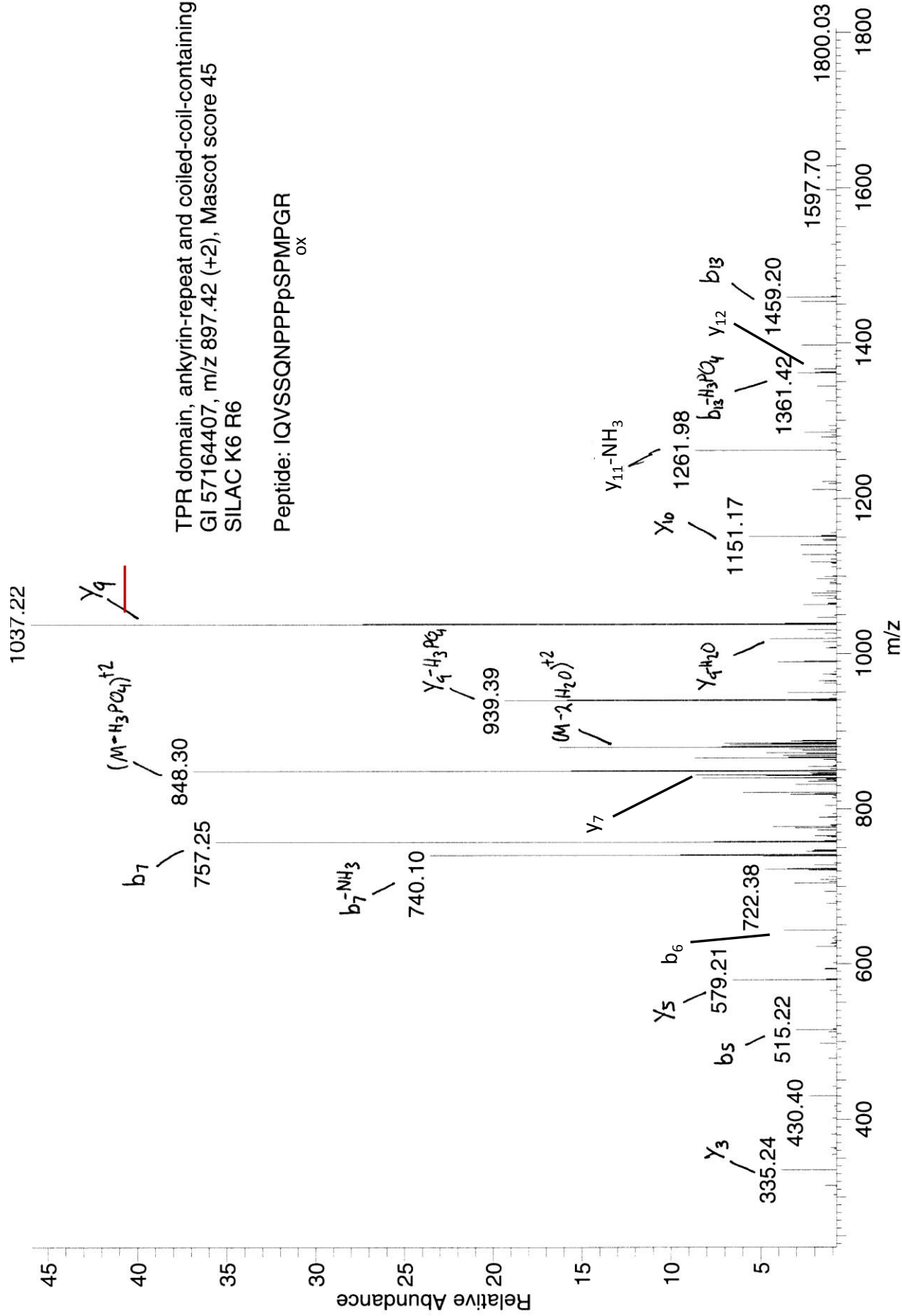
TBC1 domain family, member 23
GI 27754079, m/z 827.38 (+2), Mascot score 74
SILAC K8 R10

Peptide: VISFIENSSpTPVDR



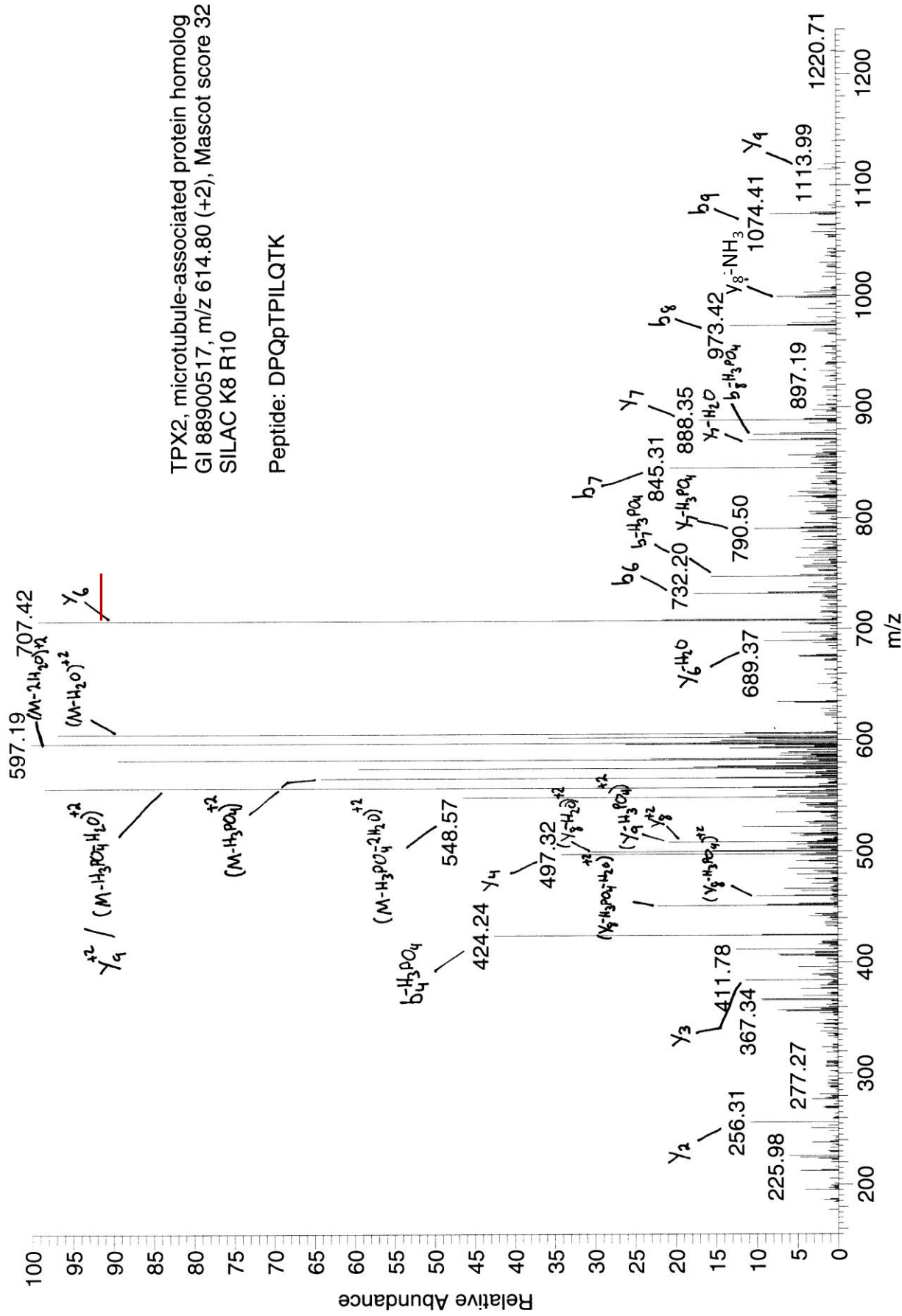
tissue factor pathway inhibitor
 GI 33859644, m/z 735.87 (+2), Mascot score 41
 SILAC K8 R10

Peptide: STVNNIVVPQpSPK



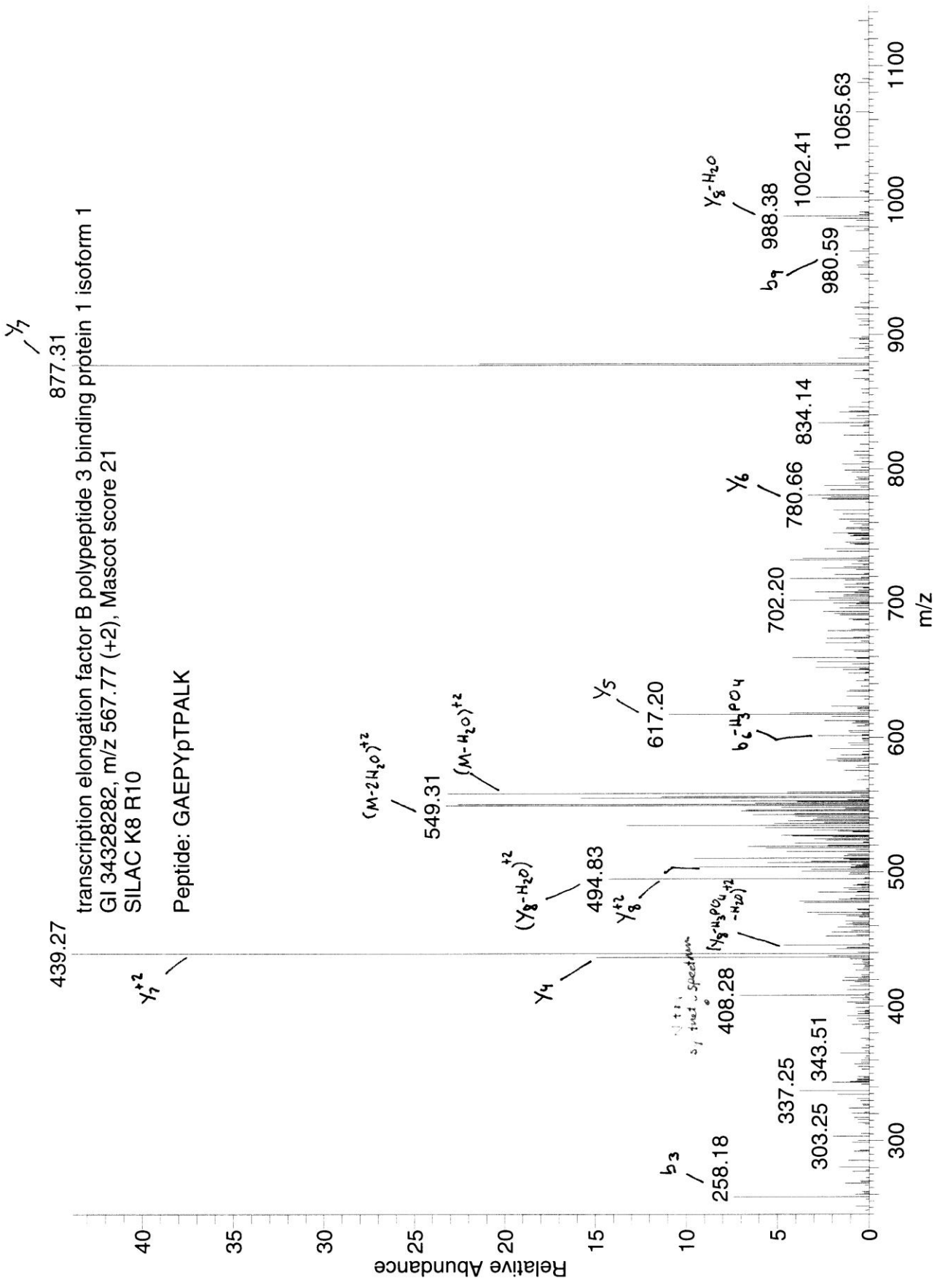
TPR domain, ankyrin-repeat and coiled-coil-containing
 GI 57164407, m/z 897.42 (+2), Mascot score 45
 SILAC K6 R6

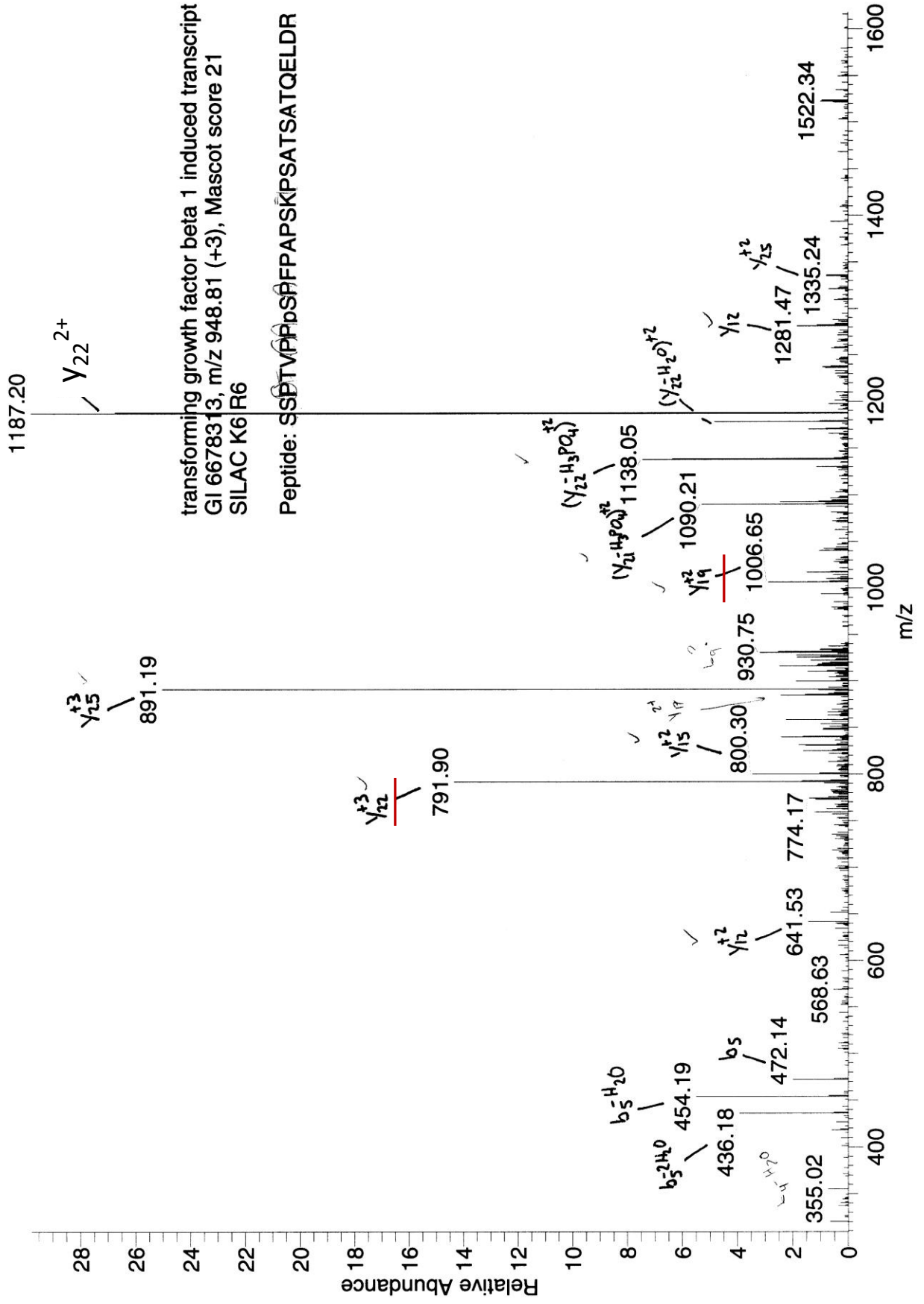
Peptide: IQVSSQNPPPPpSPMPGR_{ox}



TPX2, microtubule-associated protein homolog
 GI 88900517, m/z 614.80 (+2), Mascot score 32
 SILAC K8 R10

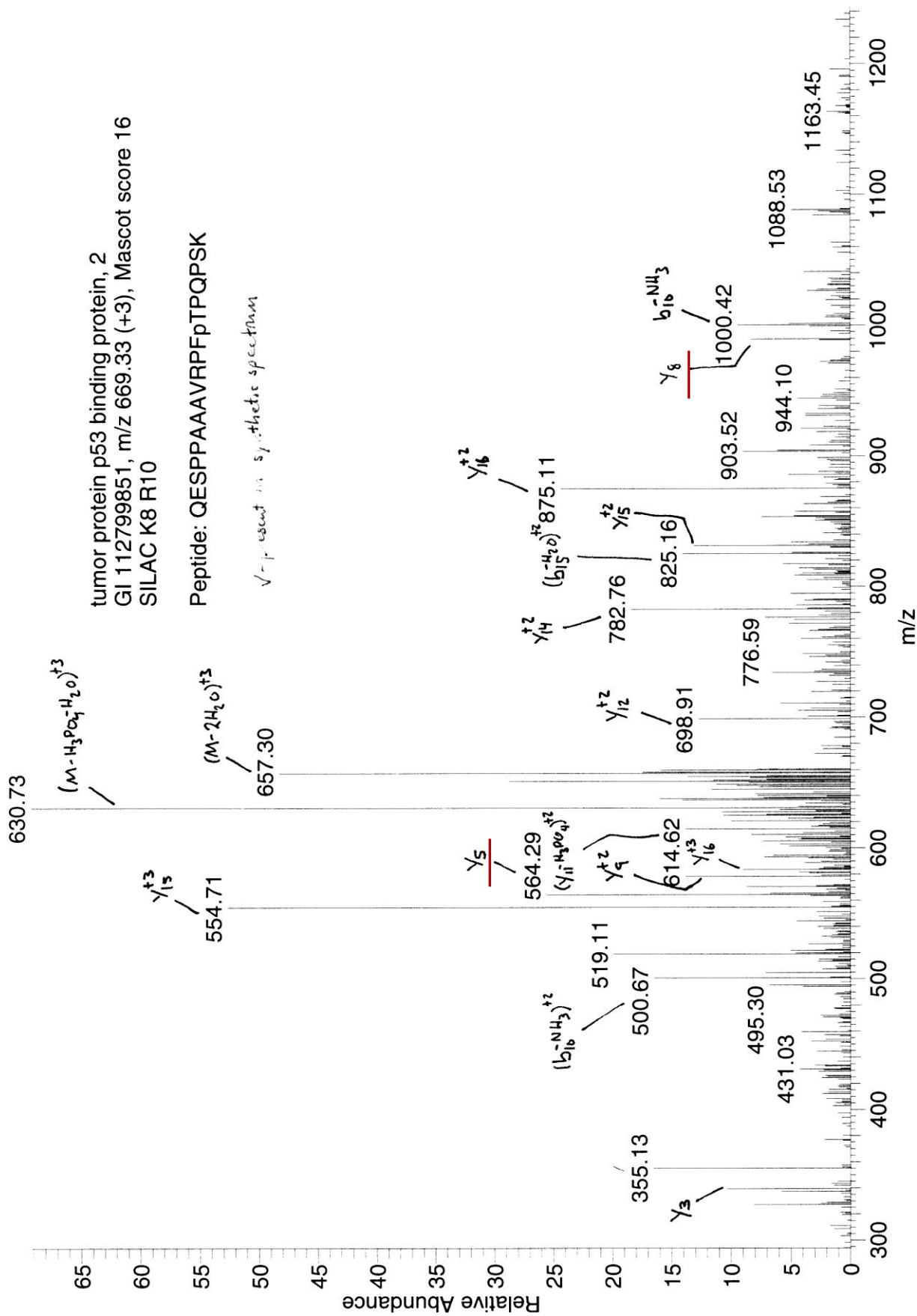
Peptide: DPQpTPILQTK





transforming growth factor beta 1 induced transcript 1
 GI 6678313, m/z 948.81 (+3), Mascot score 21
 SILAC K6 R6

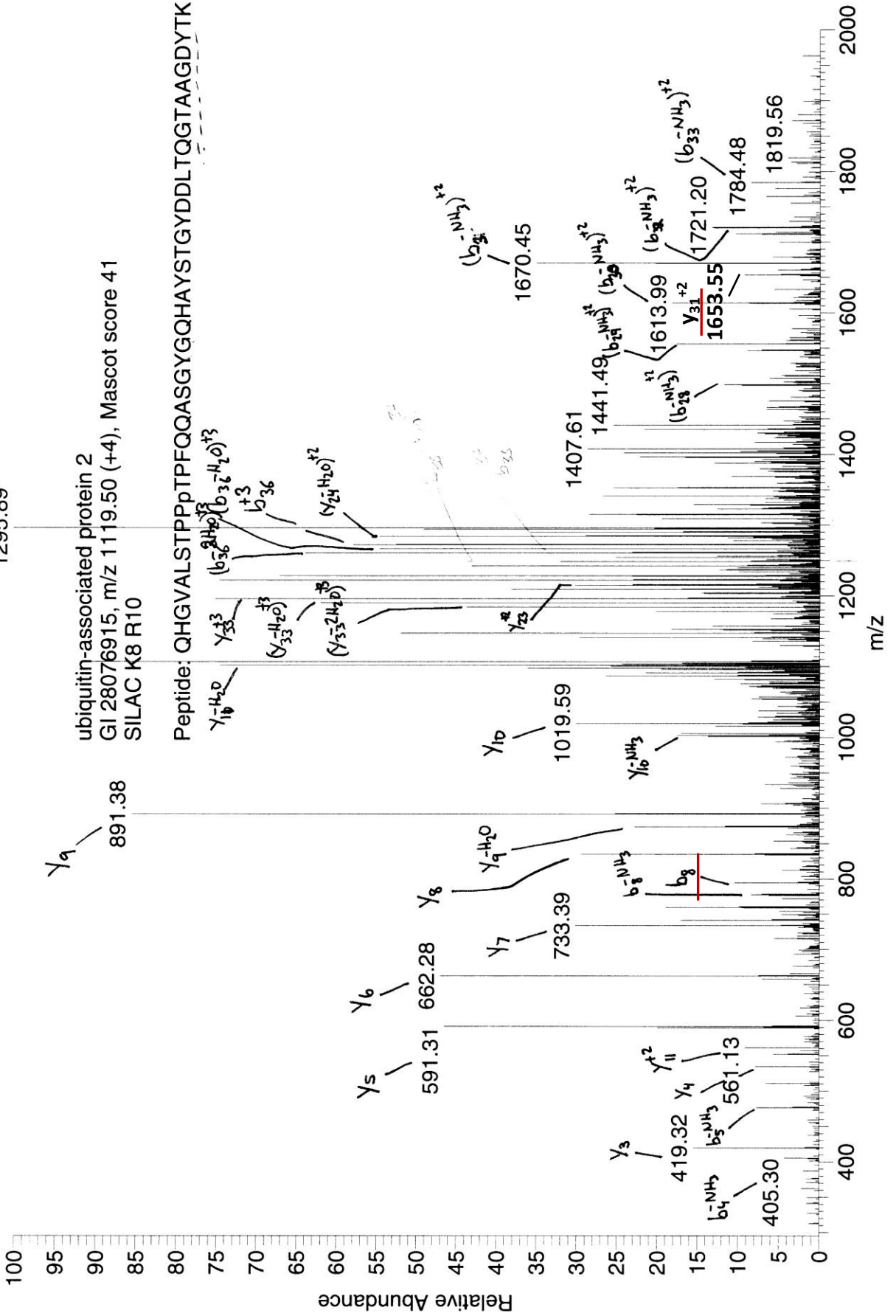
Peptide: ~~S~~P~~T~~V~~P~~P~~P~~P~~P~~P~~P~~A~~P~~S~~P~~K~~P~~S~~A~~T~~S~~A~~T~~Q~~E~~L~~D~~R



tumor protein p53 binding protein, 2
 GI 11279851, m/z 669.33 (+3), Mascot score 16
 SILAC K8 R10

Peptide: QESPAAAVRPFpTPQPSK

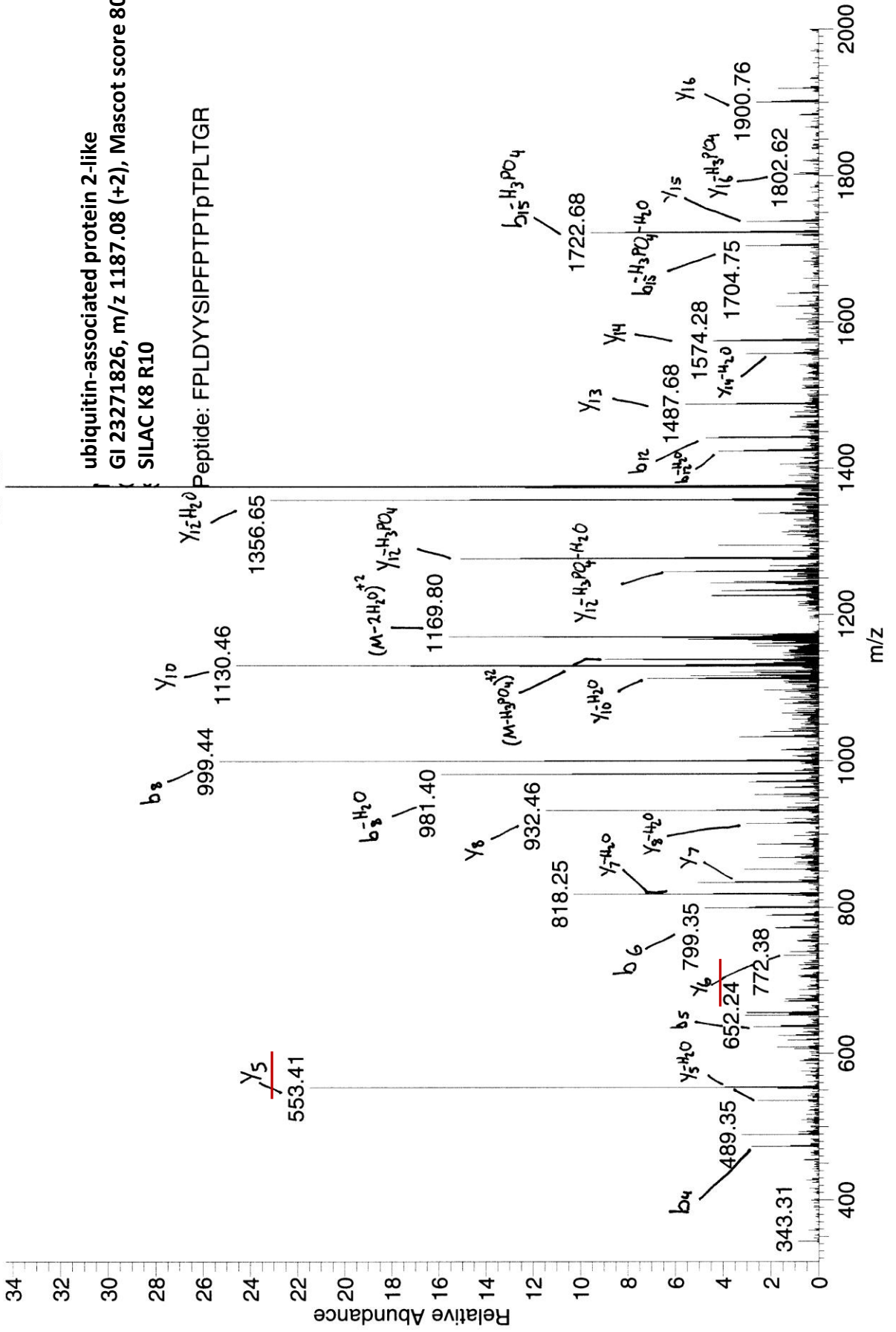
✓ - p-escut in synthetic spectrum

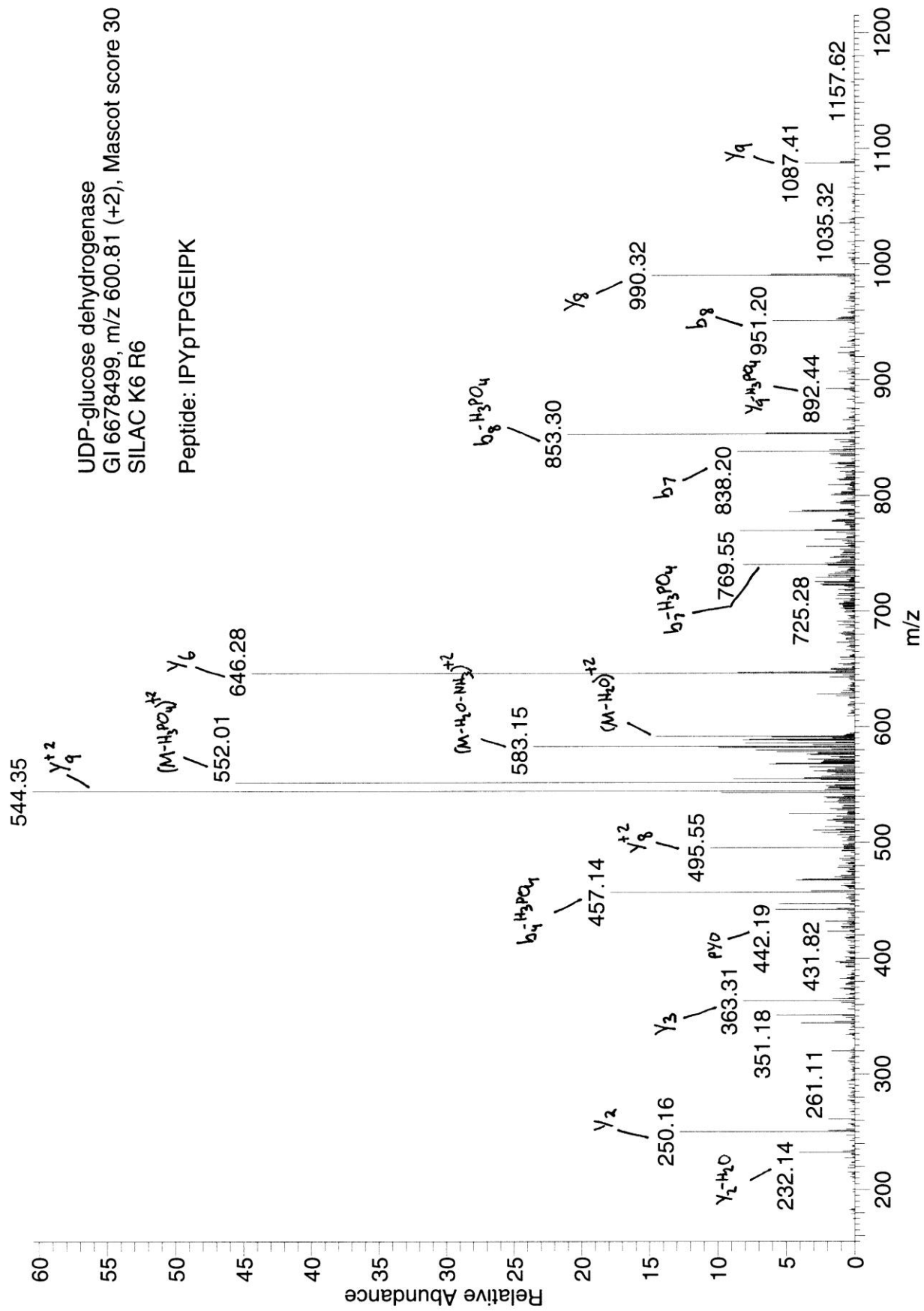


1374.67 γ_{12}

ubiquitin-associated protein 2-like
GI 23271826, m/z 1187.08 (+2), Mascot score 80
SILAC K8 R10

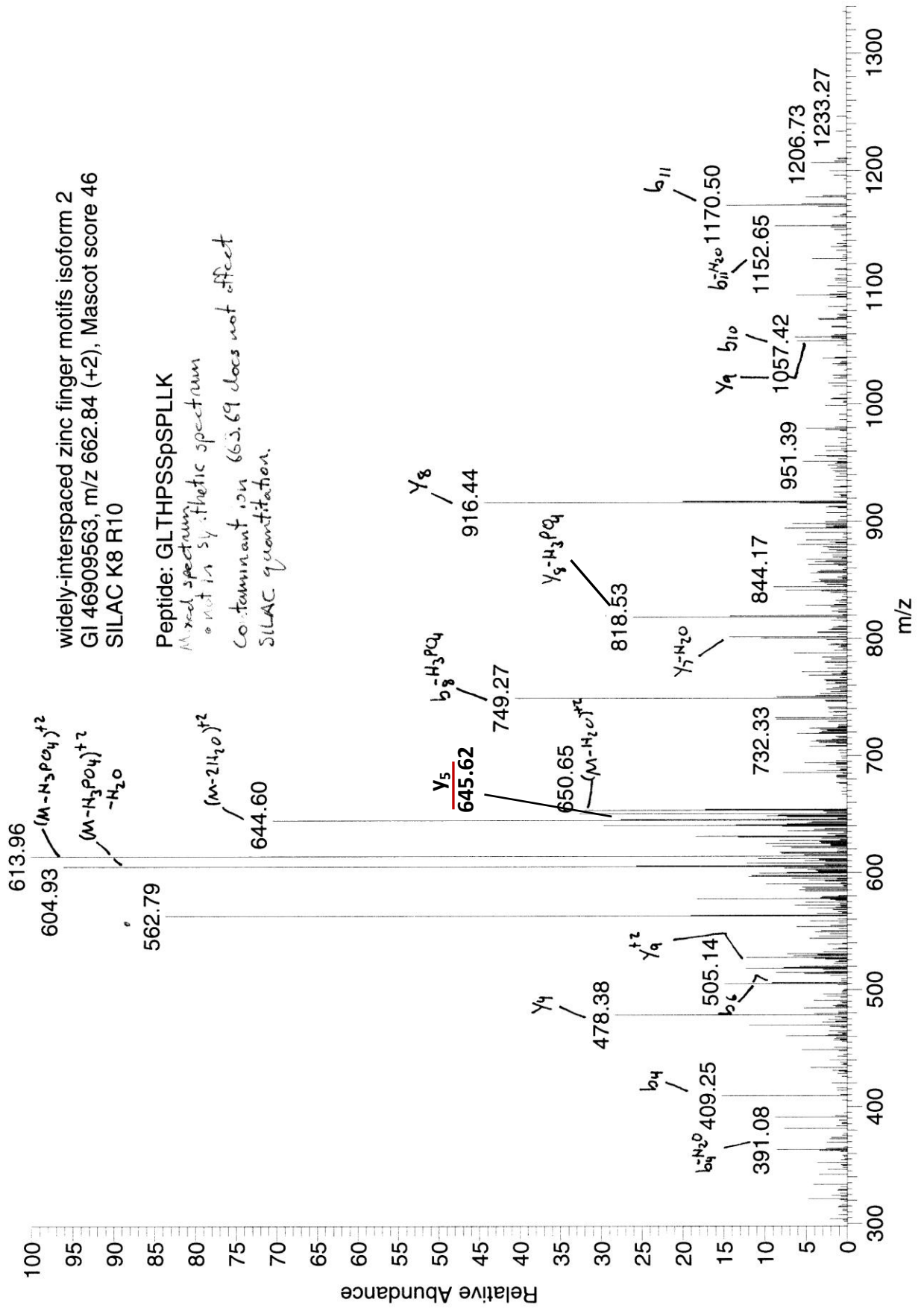
Peptide: FPLDYYSIPFFPTpTPLTGR





UDP-glucose dehydrogenase
 GI 6678499, m/z 600.81 (+2), Mascot score 30
 SILAC K6 R6

Peptide: IPYpTPGEIPK



widely-interspaced zinc finger motifs isoform 2
 GI 46909563, m/z 662.84 (+2), Mascot score 46
 SILAC K8 R10

Peptide: GLTHPSSpSPLLK

*Mixed spectrum
 • not in synthetic spectrum
 Contaminant ion 662.69 does not affect
 SILAC quantitation.*