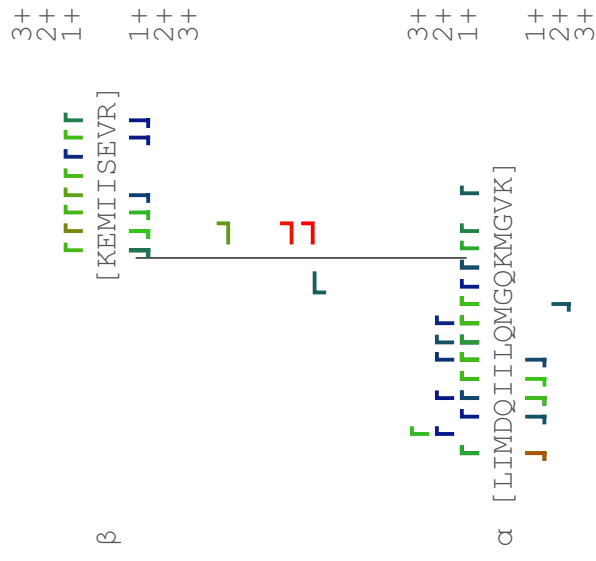
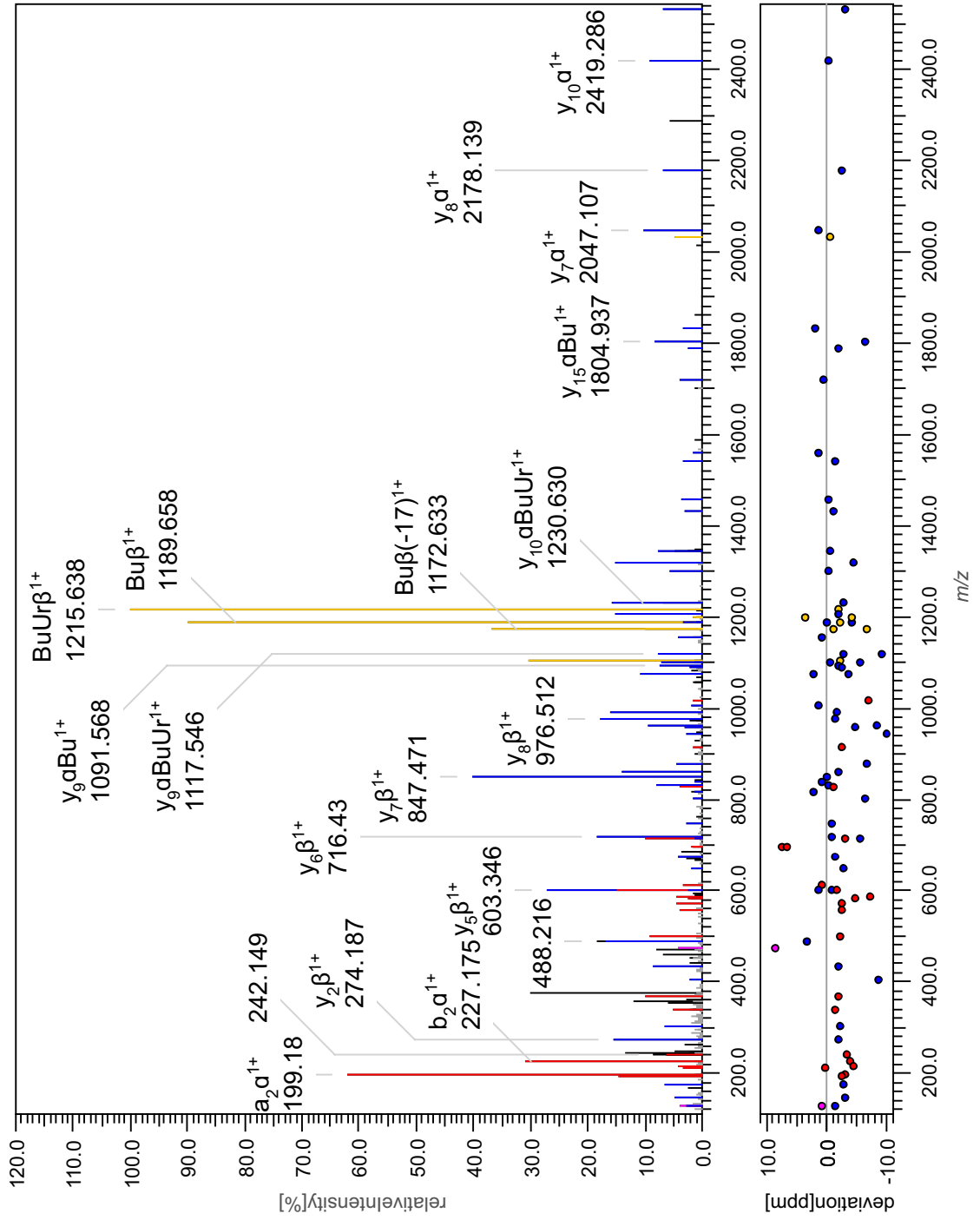
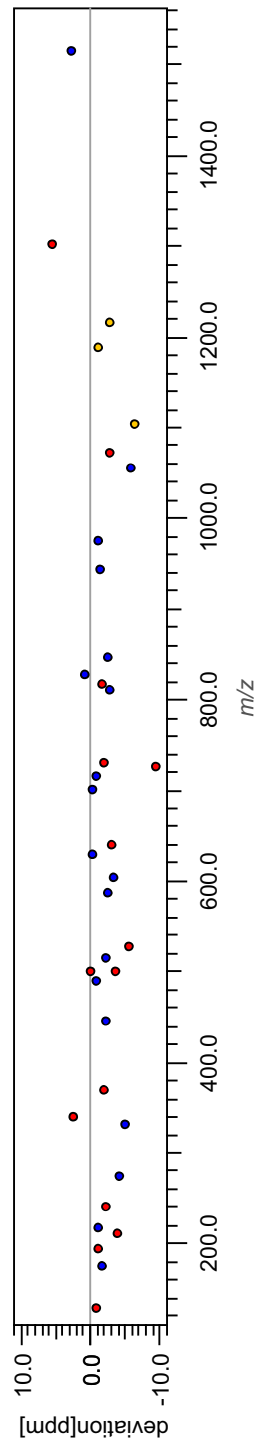
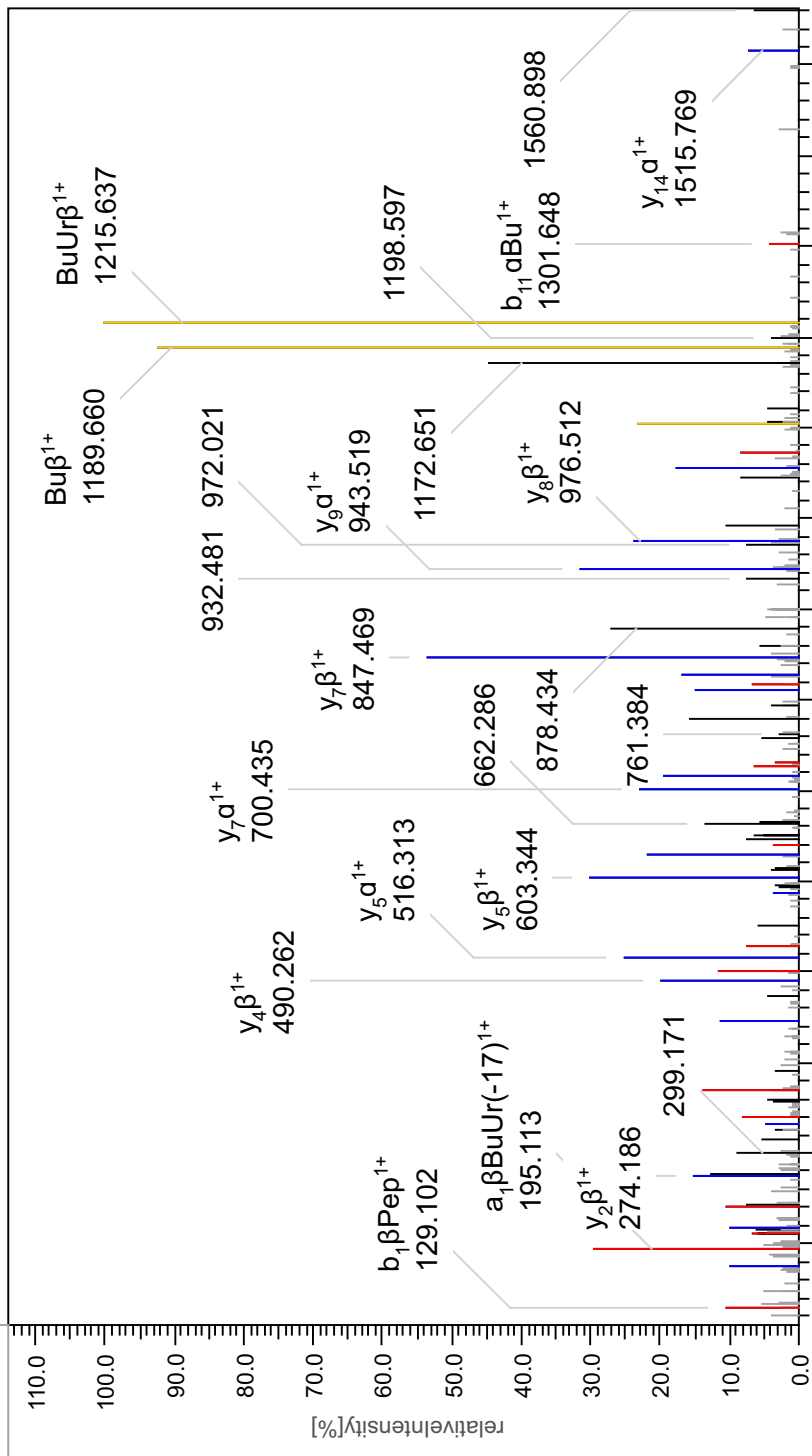


XL-MS spectra of intra-domain crosslinks detected in DSBU crosslinked SurA.

theor.Mass(M+H+):3245.749
 PrecursorMass(M+H+):3245.74
 Deviation:-2.79ppm
 m/z:812.1905
 Charge:+4



theor.Mass(M+H+):3343.76
 PrecursorMass(M+H+):3343.754
 Deviation:-1.74ppm
 m/z:836.694
 Charge:+4



3+
2+
1+

β [KEMIISEVR]

1+
2+
3+

3+
2+
1+

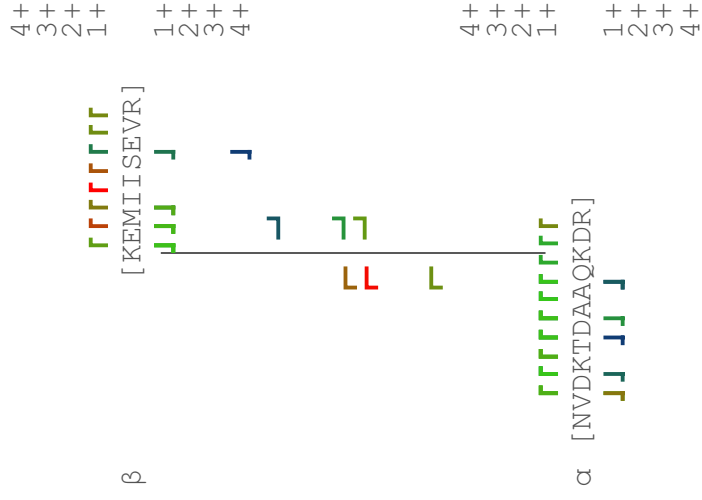
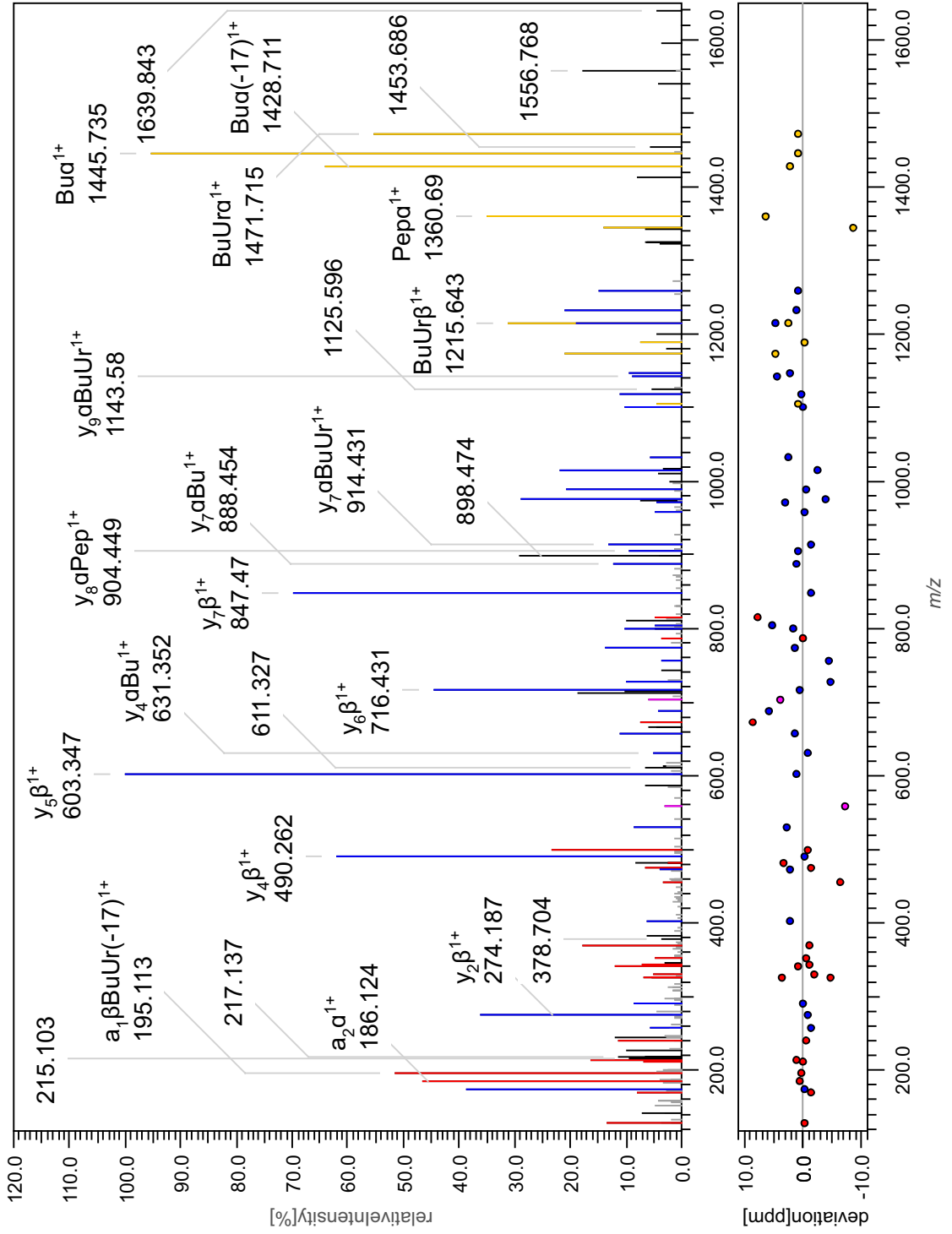
α [MGVKISDEQLDQAIAIAK]

1+
2+
3+



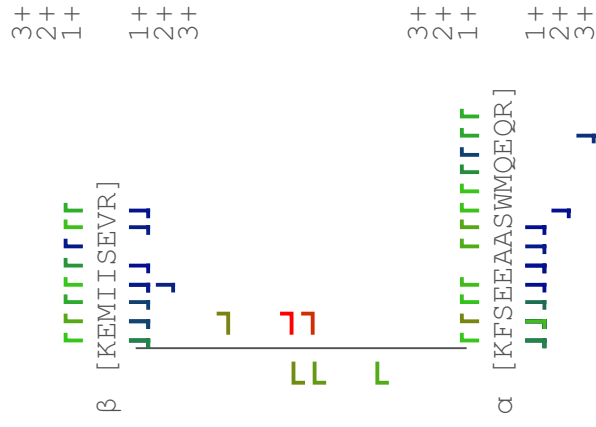
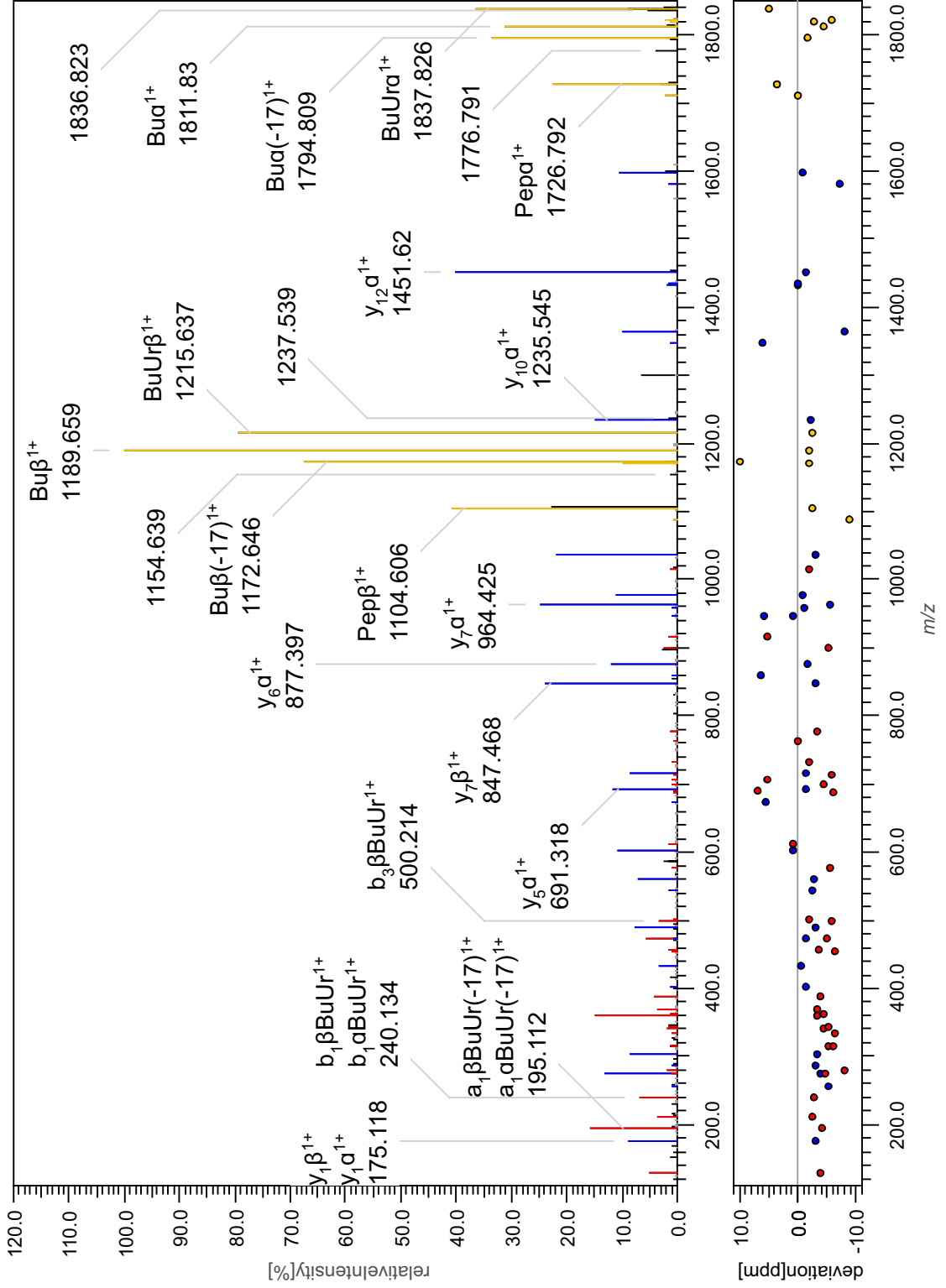
K134-K394

theor.Mass(M+H+): 2660.367
 PrecursorMass(M+H+): 2660.364
 Deviation: -1.13ppm
 m/z: 665.8465
 Charge: +4

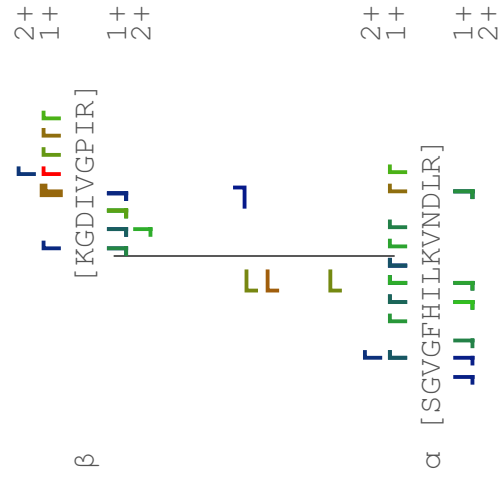
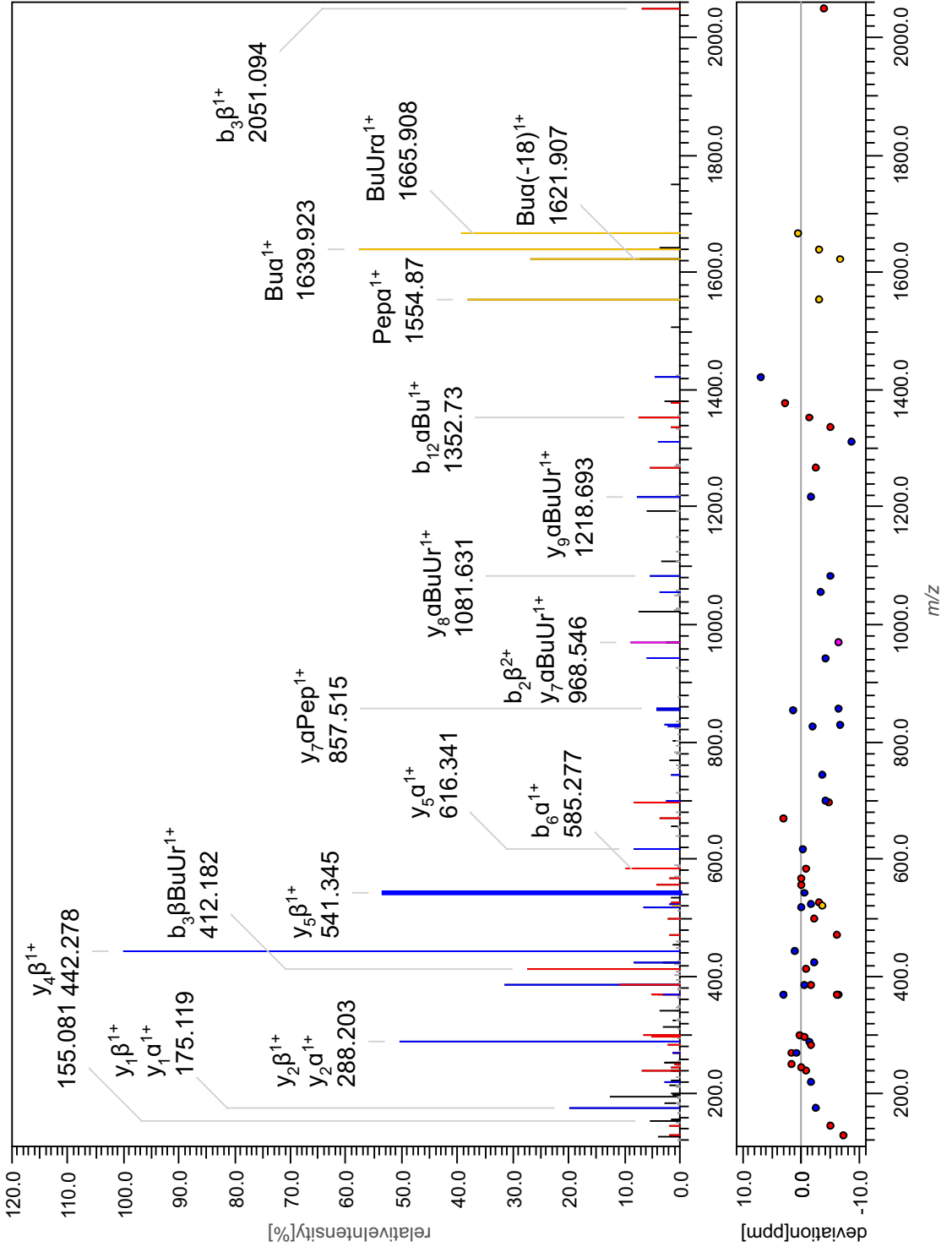


K134-K405

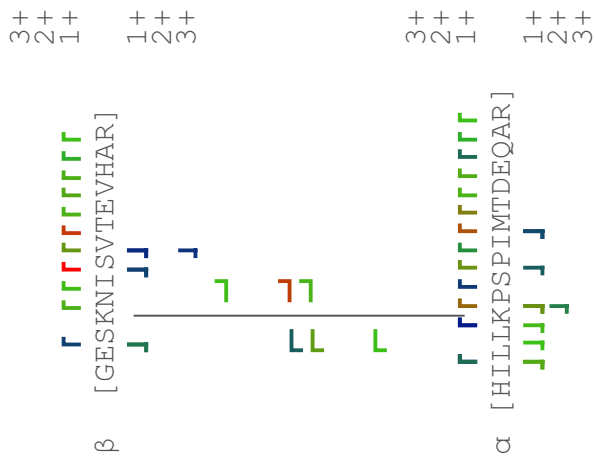
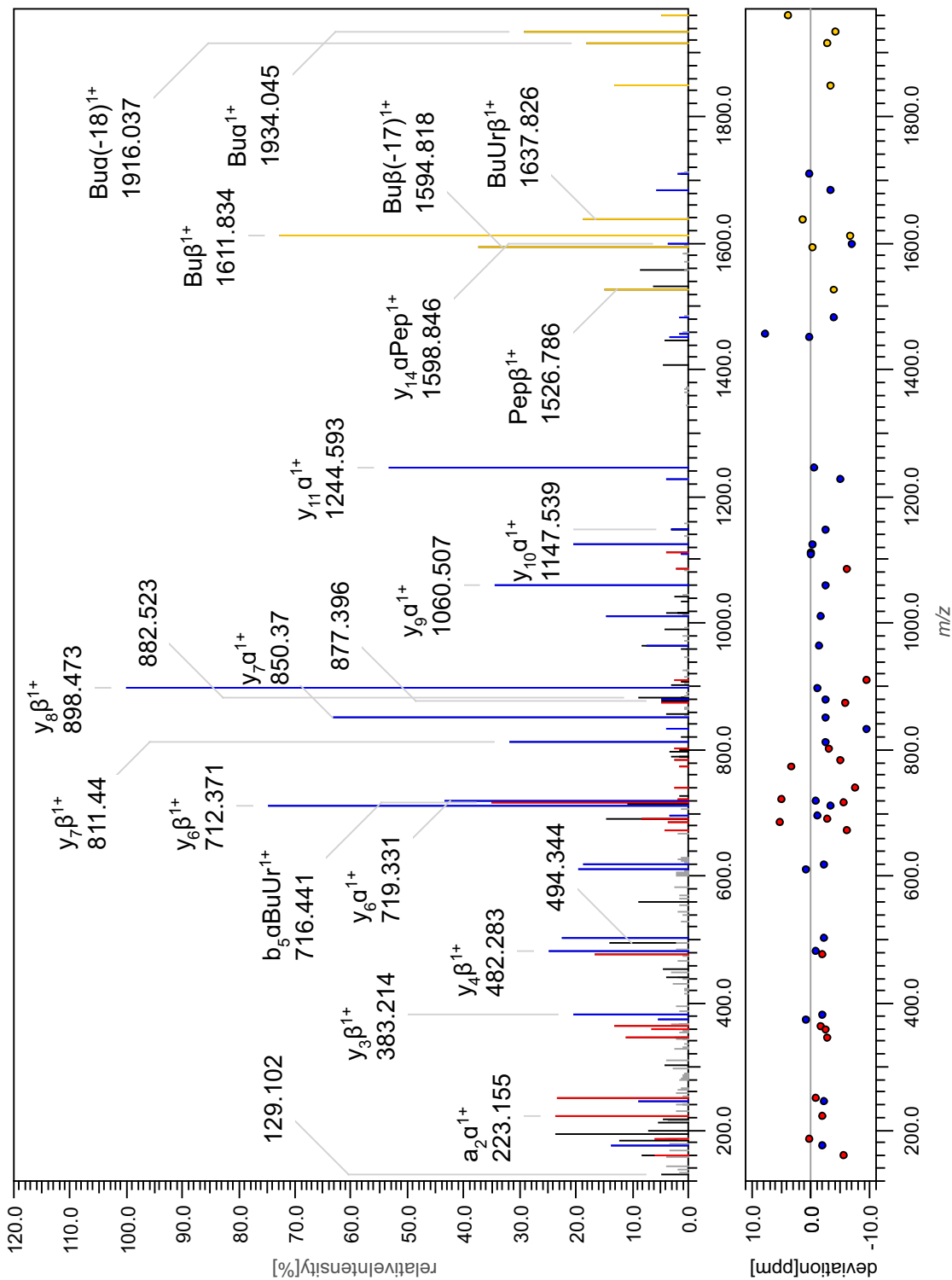
theor.Mass(M+H+): 3026.471
 PrecursorMass(M+H+): 3026.463
 Deviation: -2.57 ppm
 m/z: 1009.4926
 Charge: +3



theor.Mass(M+H+):2704.526
 PrecursorMass(M+H+):2704.53
 Deviation1.55ppm
 m/z:541.7118
 Charge:+5

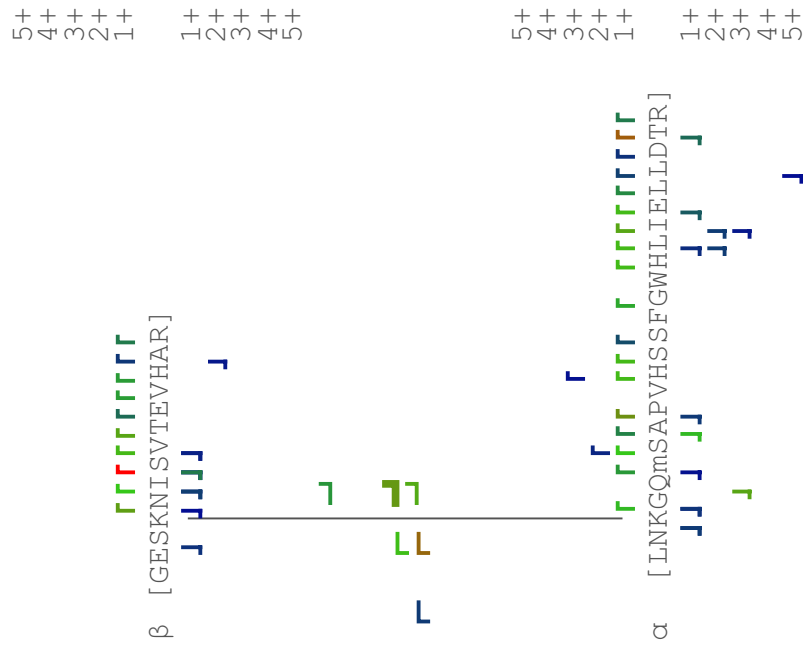
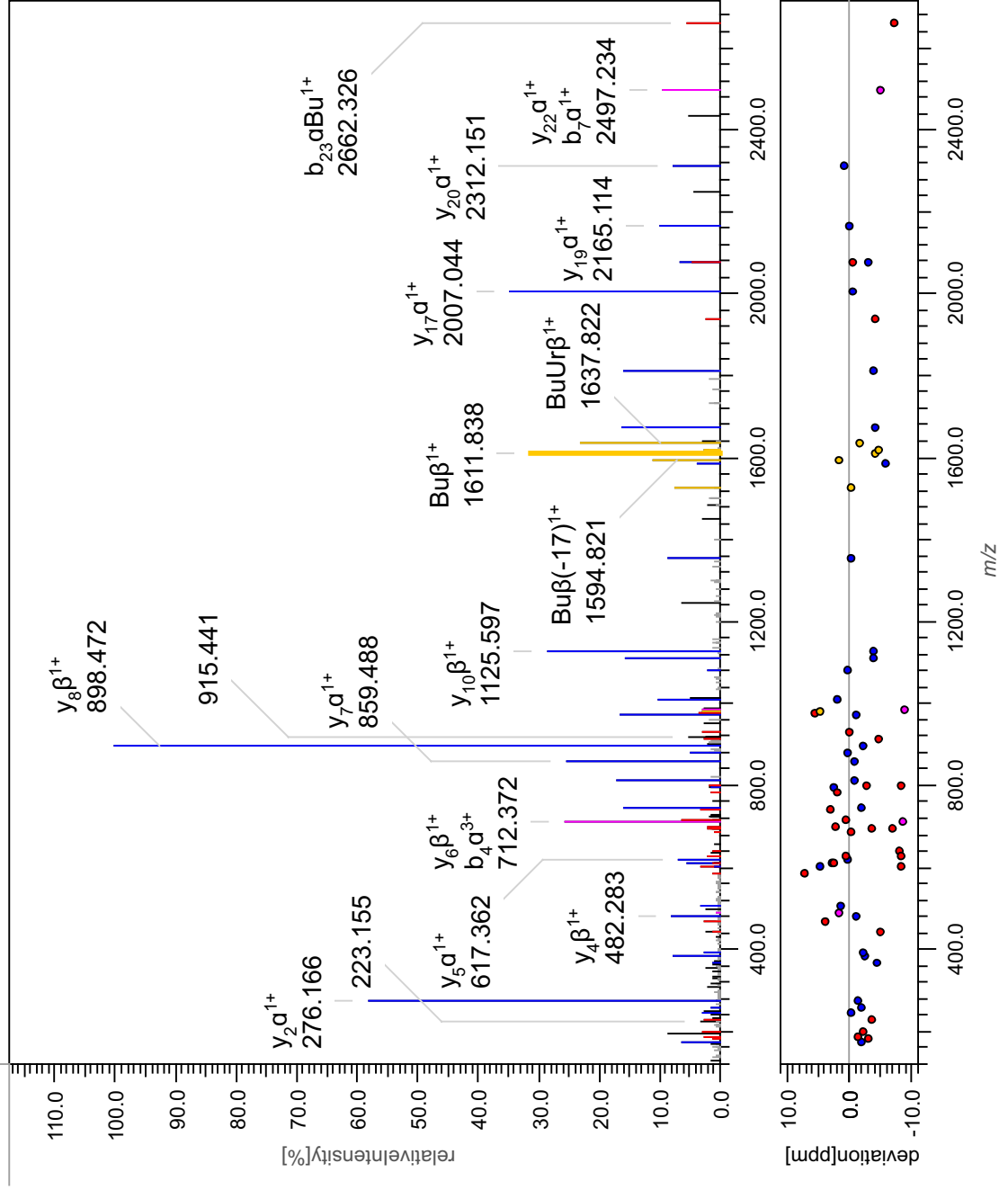


theor.Mass(M+H+):3570.87
 PrecursorMass(M+H+):3570.859
 Deviation-3.02ppm
 m/z:714.9776
 Charge:+5

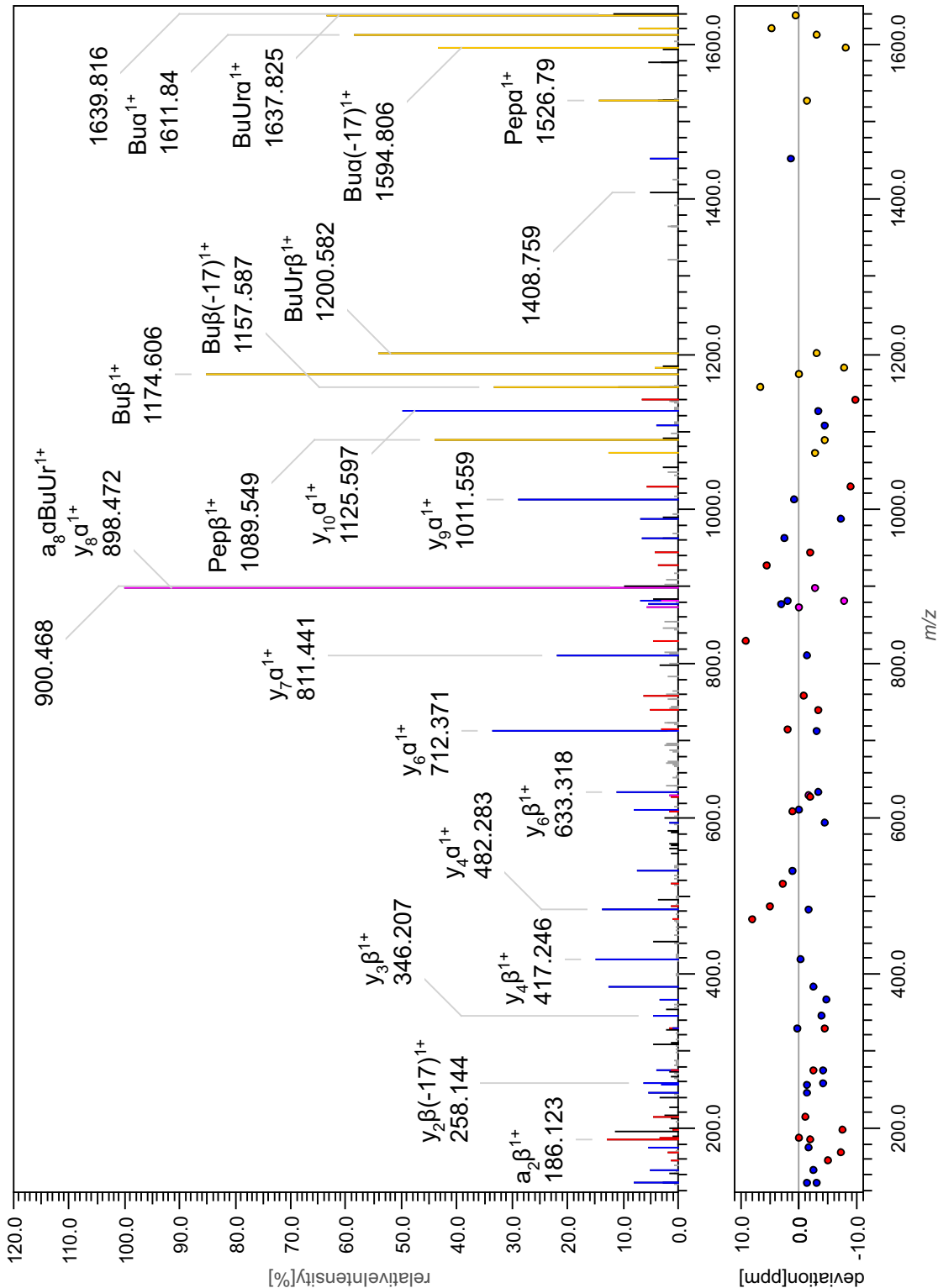


theor.Mass(M+H+):4574.321
 PrecursorMass(M+H+):4574.315
 Deviation:-1.35ppm
 m/z:915.66876
 Charge:+5

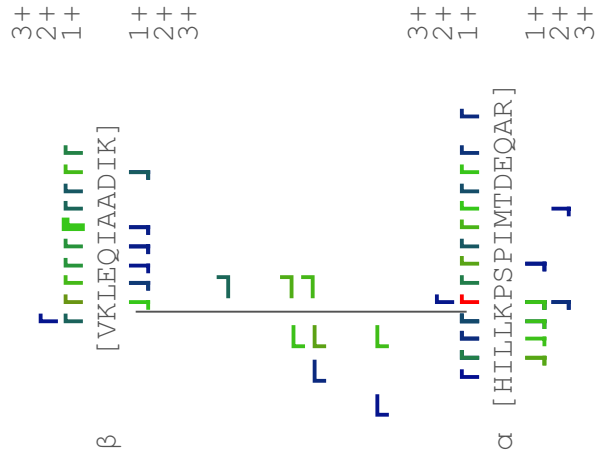
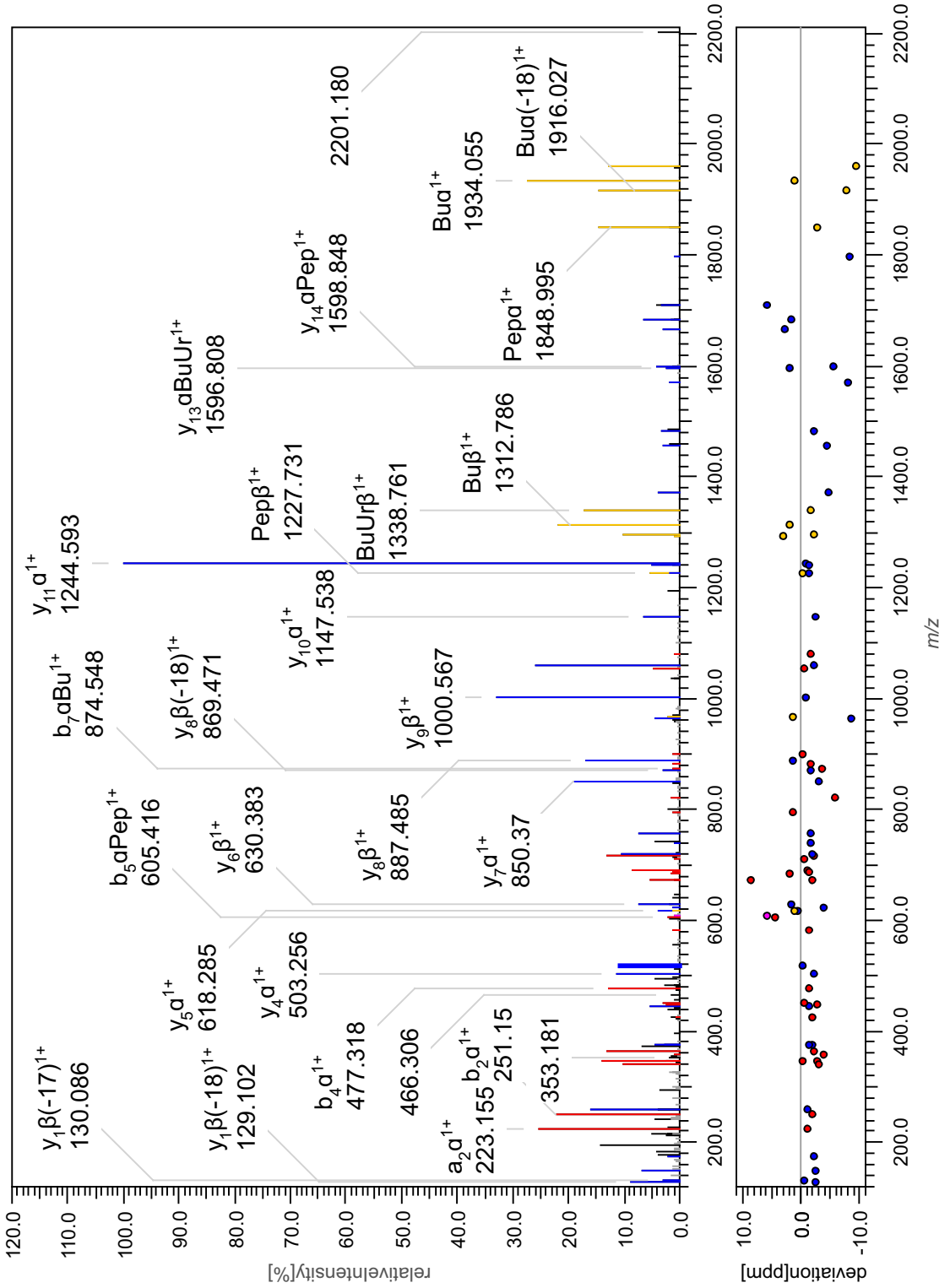
K278-K362



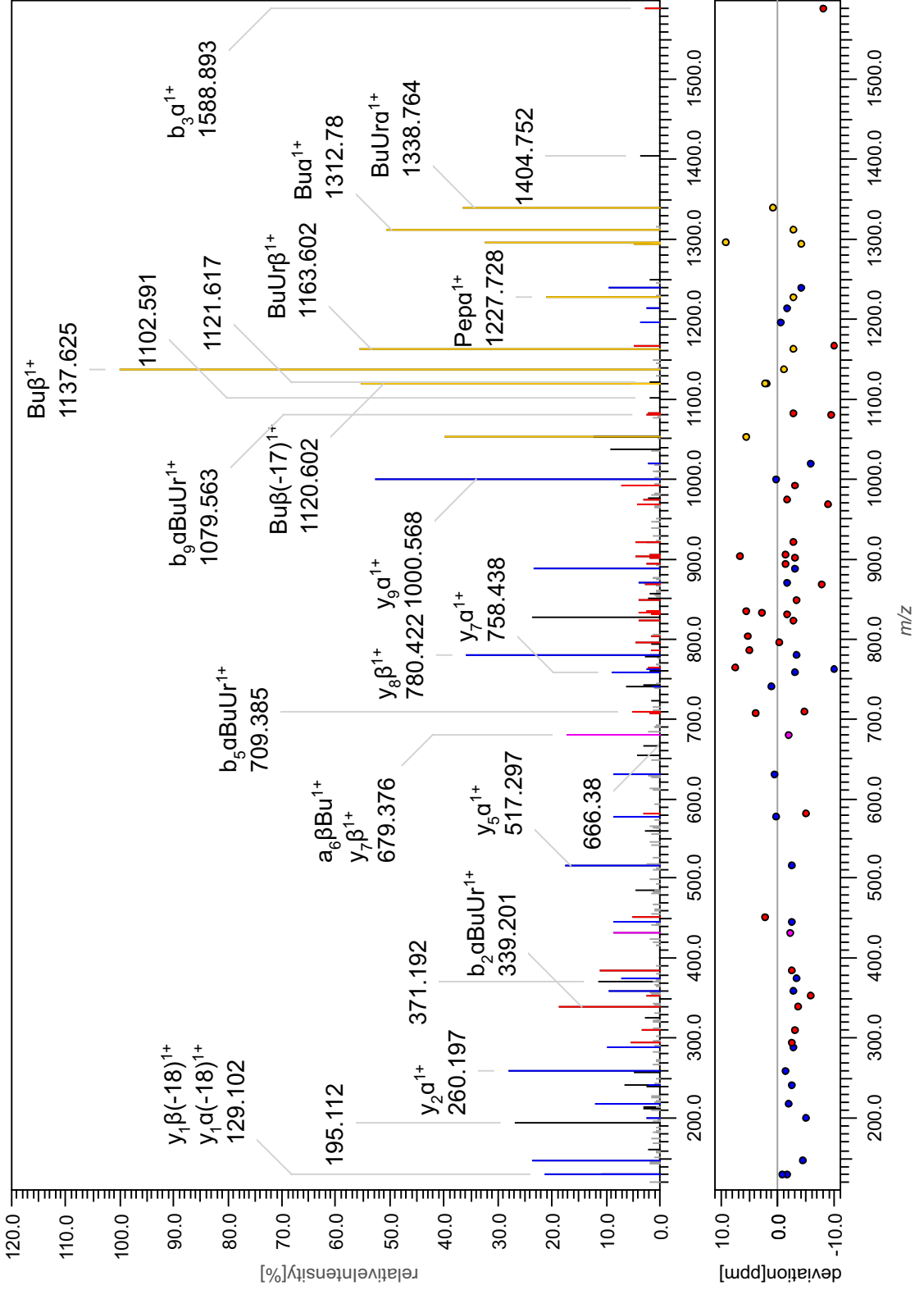
theor.Mass(M+H+):2811.423
 PrecursorMass(M+H+):2811.413
 Deviation:-3.48ppm
 m/z:937.8093
 Charge:+3



theor.Mass(M+H+):3271.808
PrecursorMass(M+H+):3271.804
Deviation:-1.2ppm
m/z:818.70654
Charge:+4

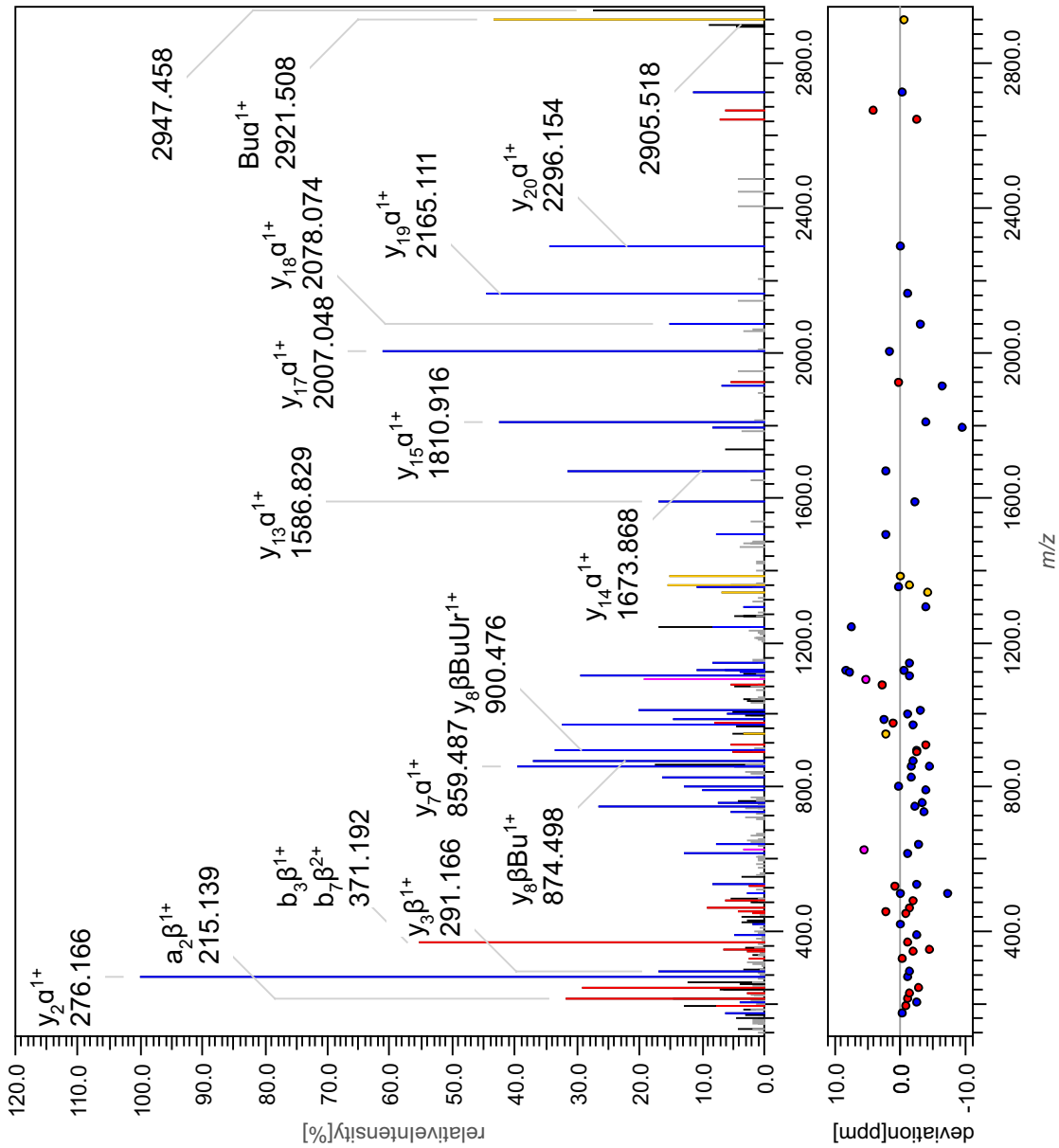


theor.Mass(M+H+):2475.382
 PrecursorMass(M+H+):2475.378
 Deviation:-1.69ppm
 m/z:825.79736
 Charge:+3



theor.Mass(M+H+):4304.25
 PrecursorMass(M+H+):4304.238
 Deviation:-2.6ppm
 m/z:861.6535
 Charge:+5

K3)



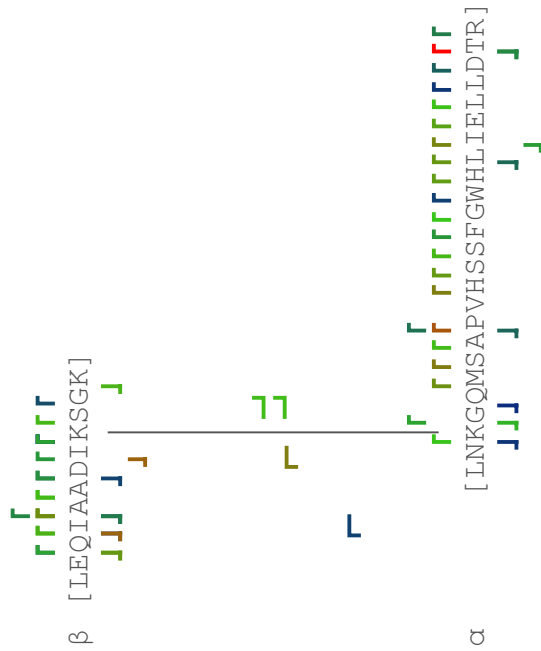
K315-K362

3+
2+
1+

1+
2+
3+

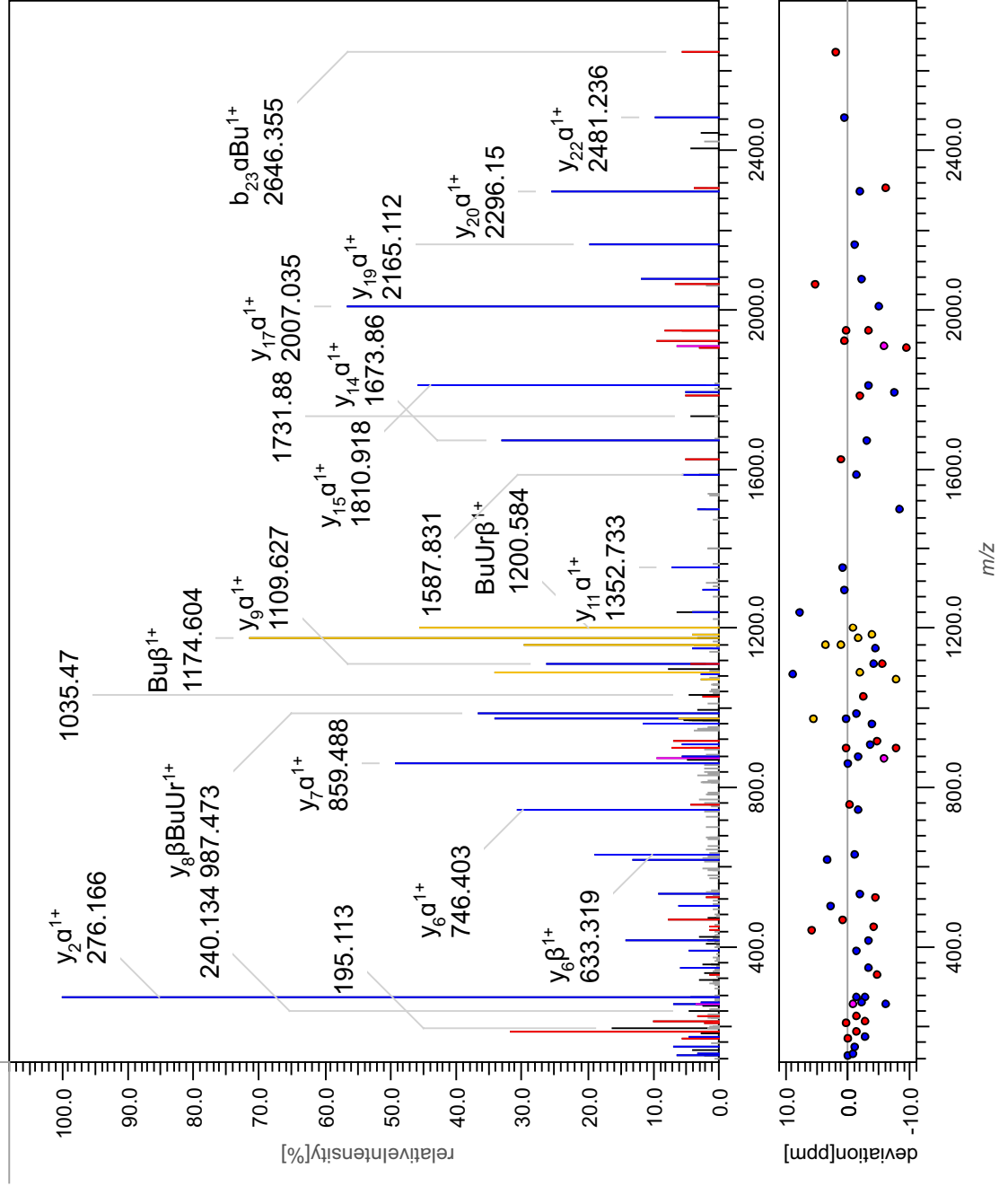
3+
2+
1+

1+
2+
3+



theor.Mass(M+H+): 4121.087
 PrecursorMass(M+H+): 4121.075
 Deviation: -2.89ppm
 m/z: 825.0209
 Charge: +5

K3



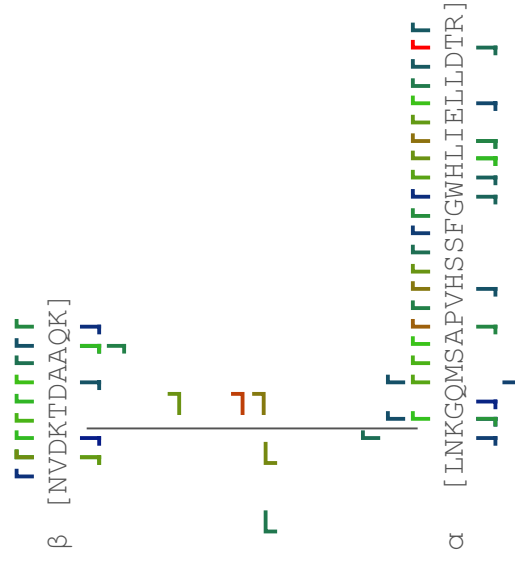
K362-K388

3+
2+
1+

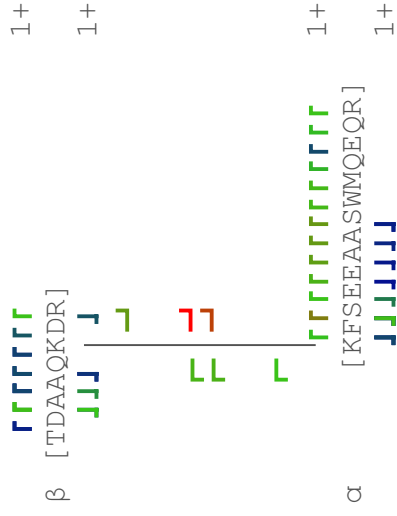
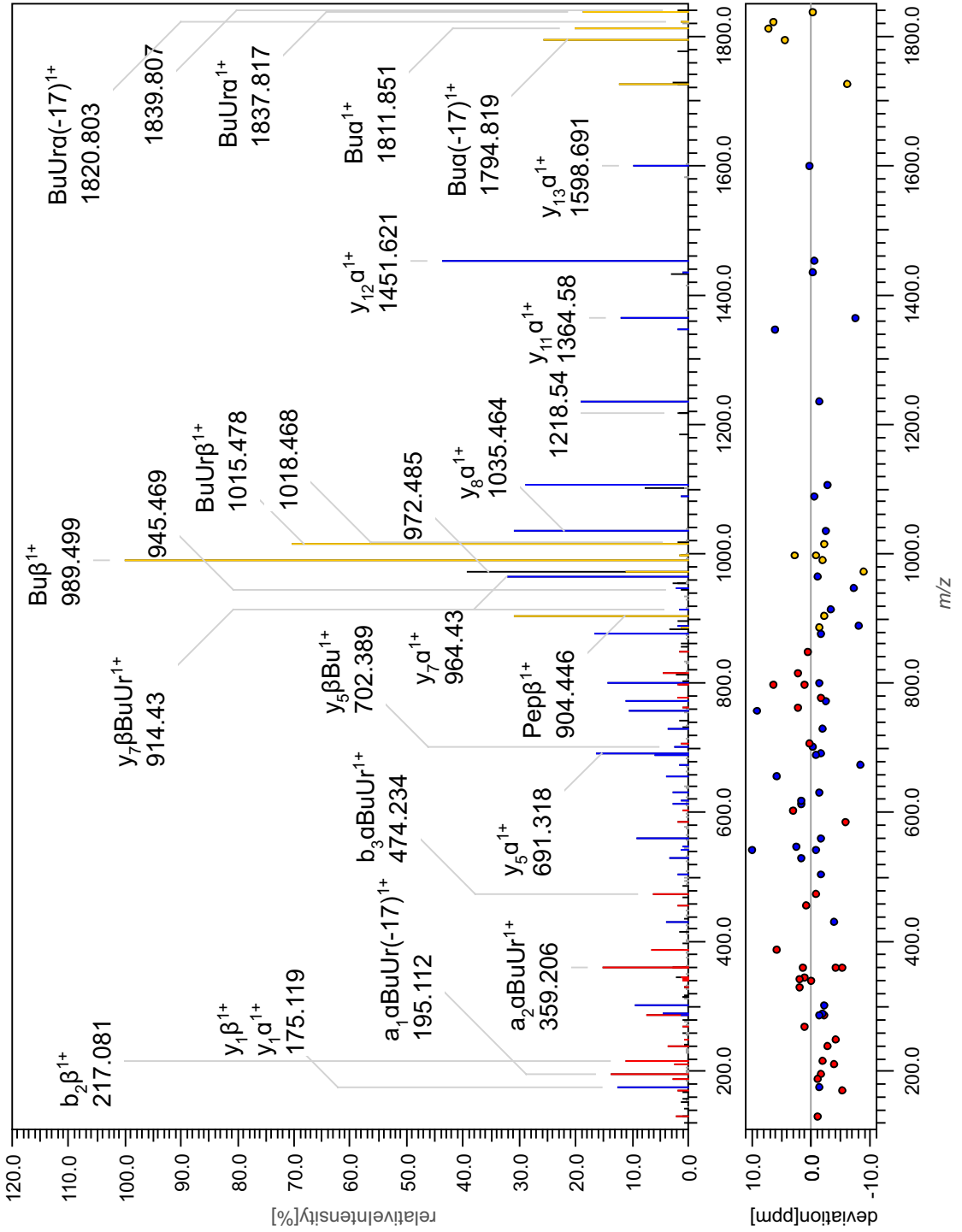
1+
2+
3+

3+
2+
1+

1+
2+
3+



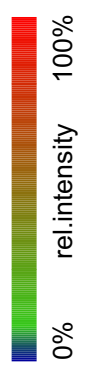
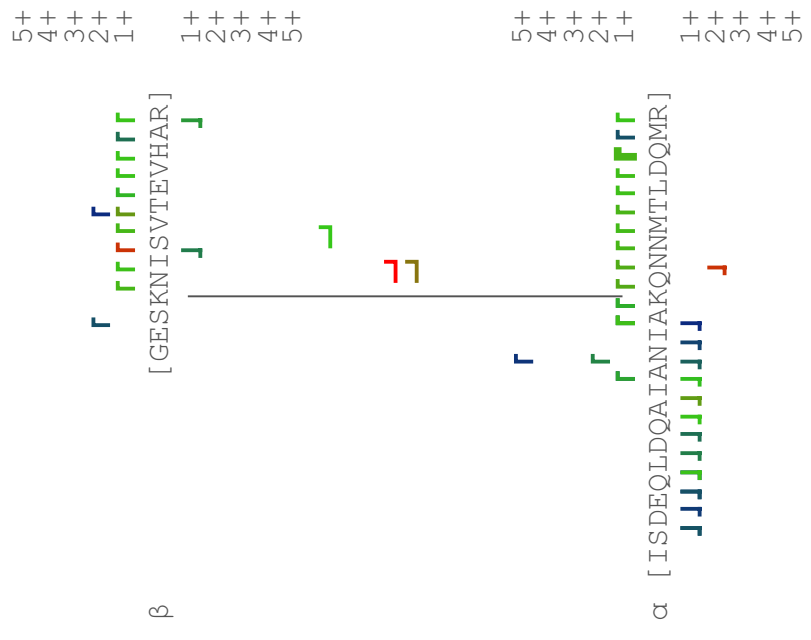
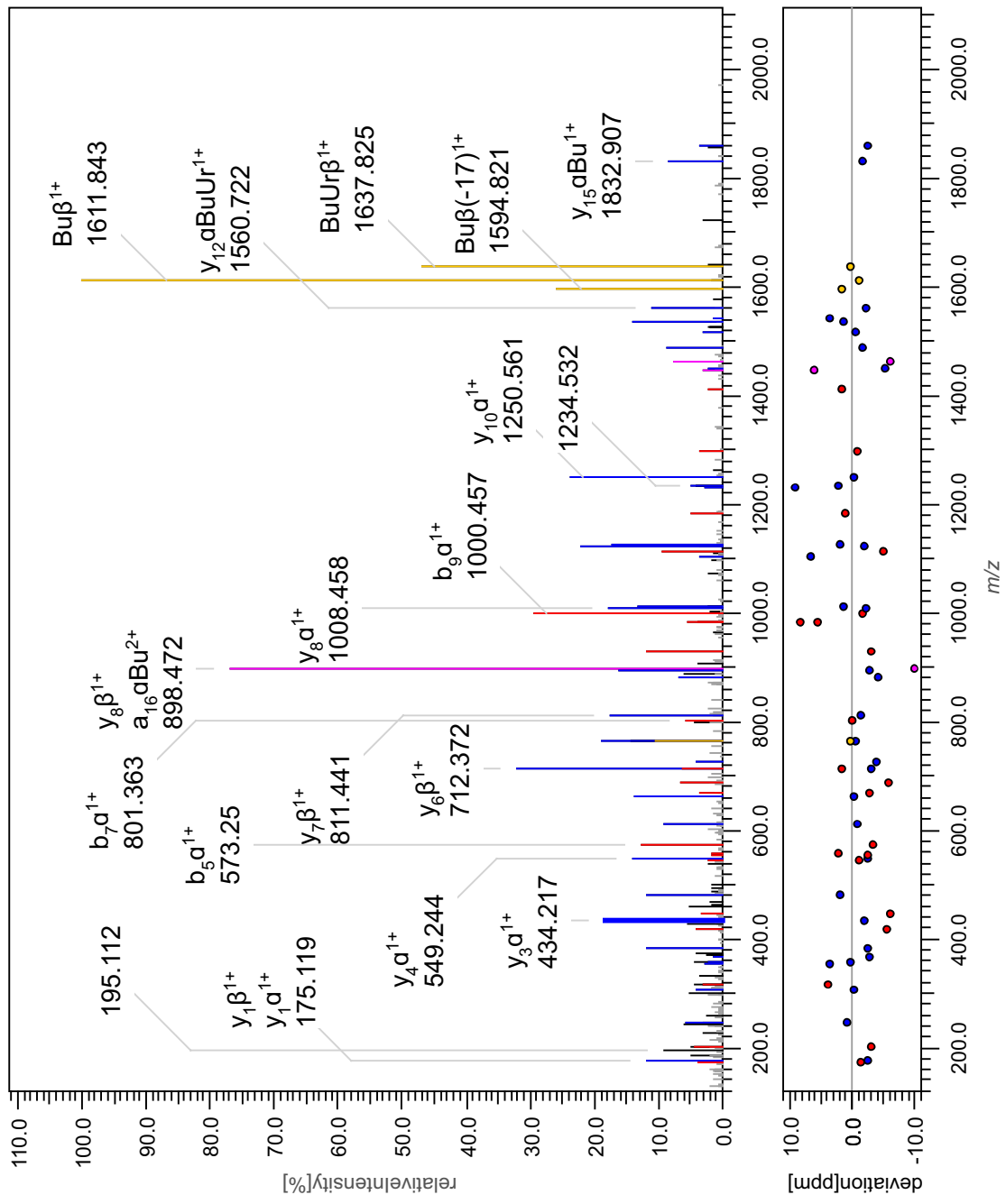
theor.Mass(M+H+):2826.311
 PrecursorMass(M+H+):2826.306
 Deviation:-1.94ppm
 m/z:942.7734
 Charge:+3



XL-MS spectra of inter-domain crosslinks detected in DSBU crosslinked SurA.

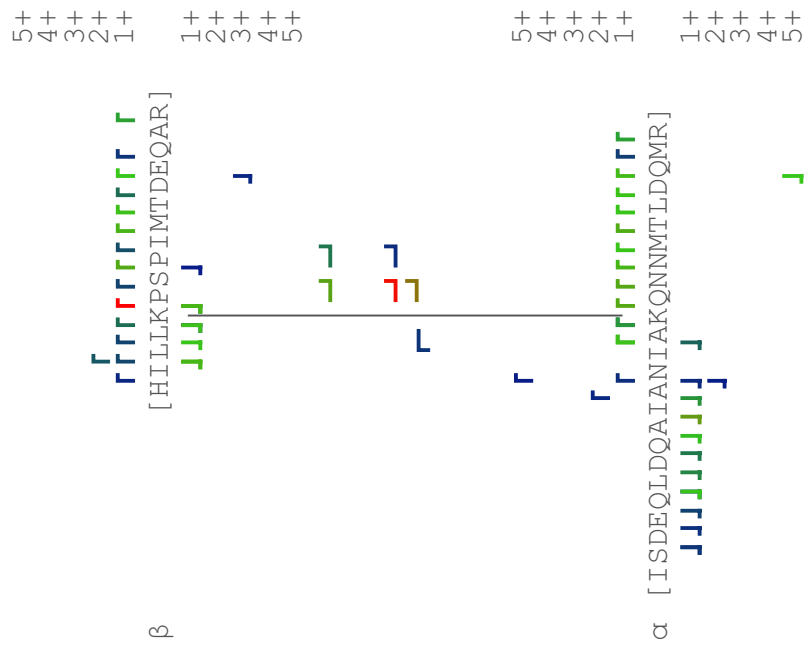
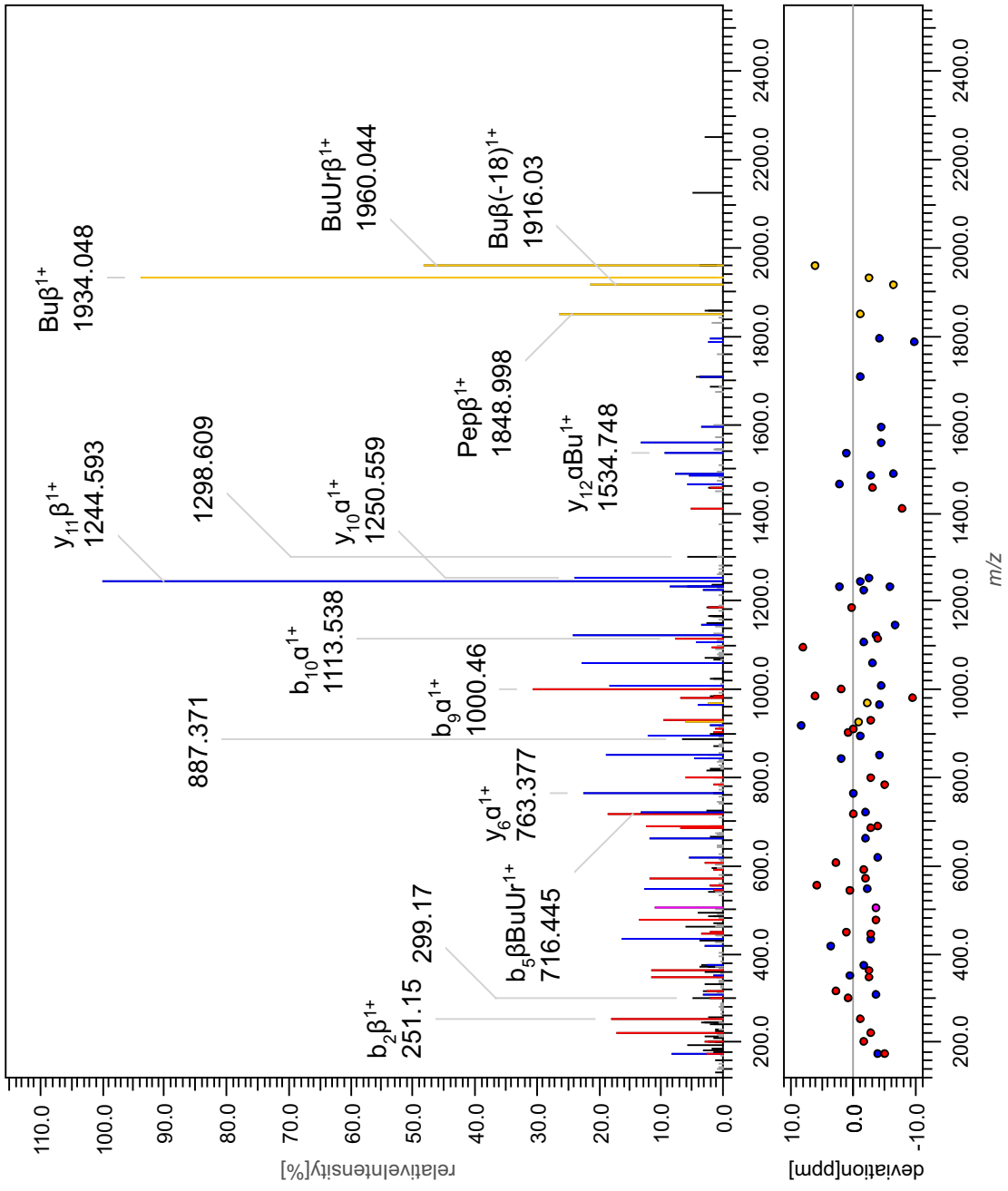
K105-K278

theor.Mass(M+H+): 4582.262
 PrecursorMass(M+H+): 4582.251
 Deviation: -2.41 ppm
 m/z: 917.2561
 Charge: +5



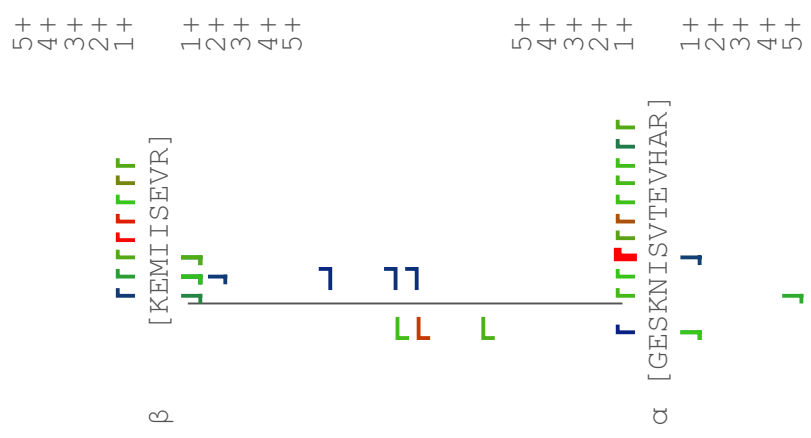
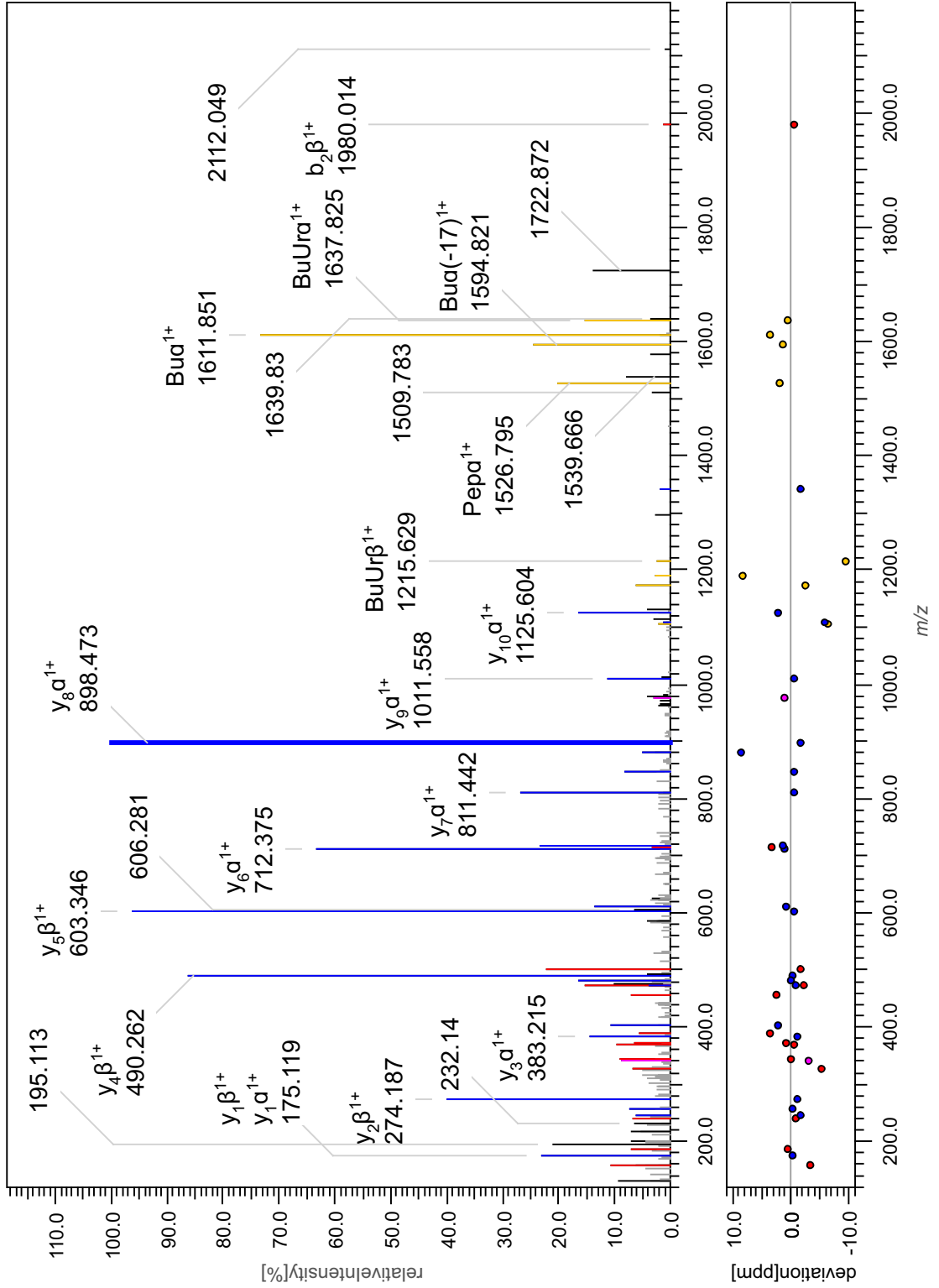
K105-K293

theor.Mass(M+H+): 4904.47
 PrecursorMass(M+H+): 4904.456
 Deviation: -2.84 ppm
 m/z: 981.6971
 Charge: +5



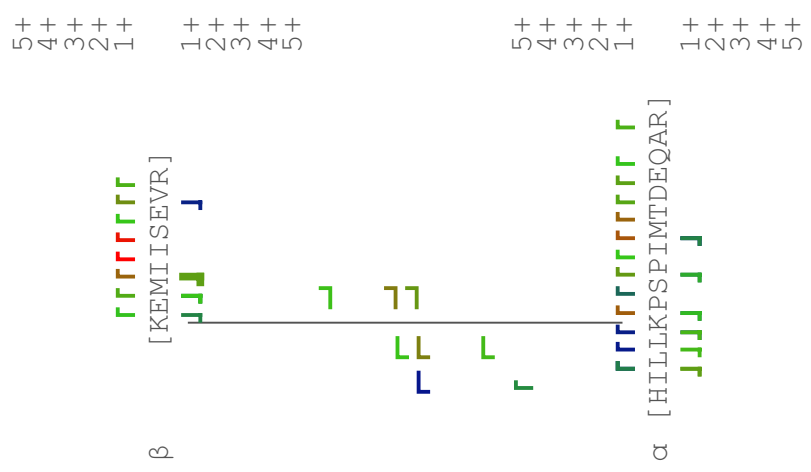
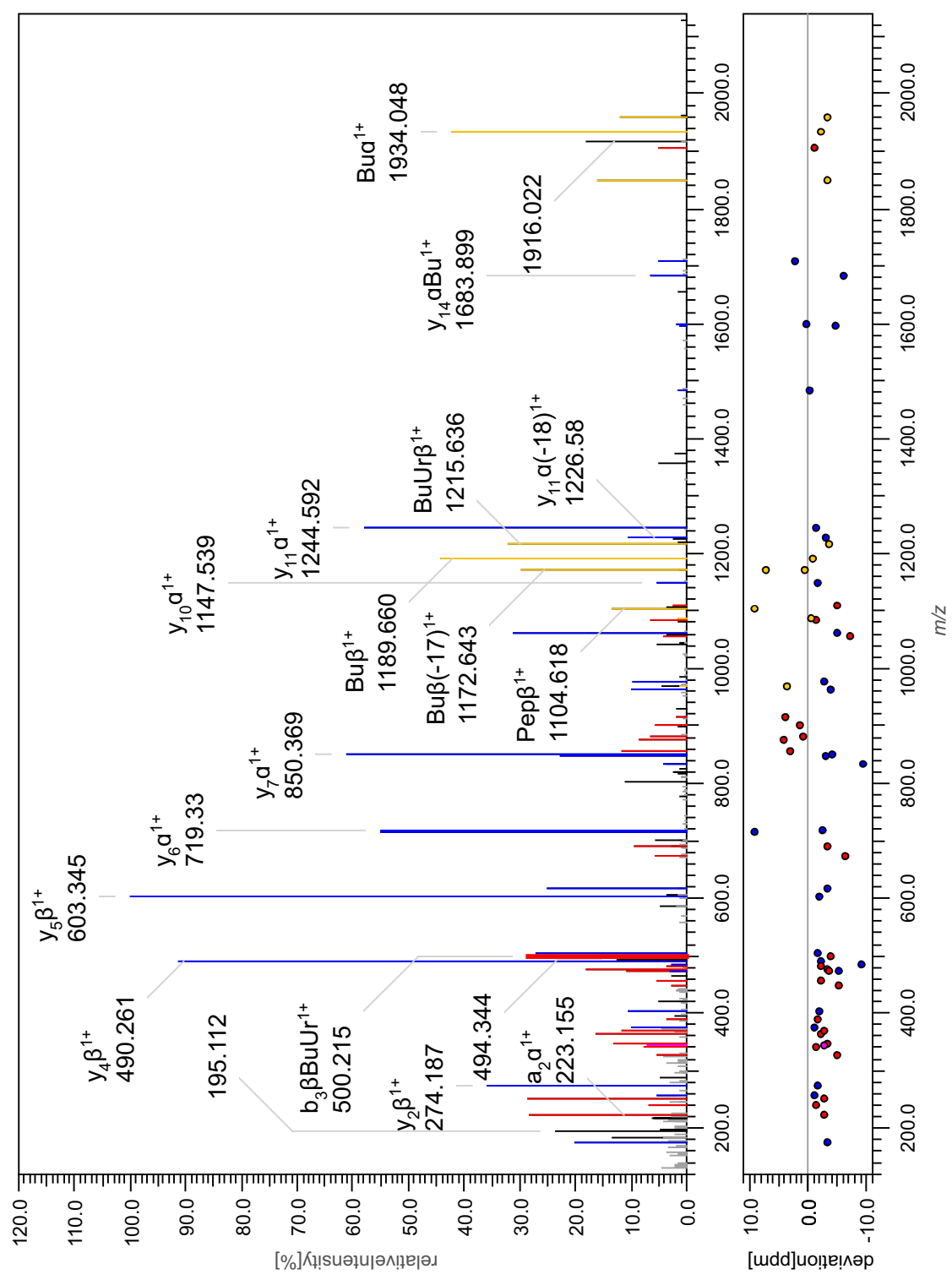
K134-K278

theor.Mass(M+H+): 2826.478
 PrecursorMass(M+H+): 2826.473
 Deviation: -1.85ppm
 m/z: 566.10034
 Charge: +5



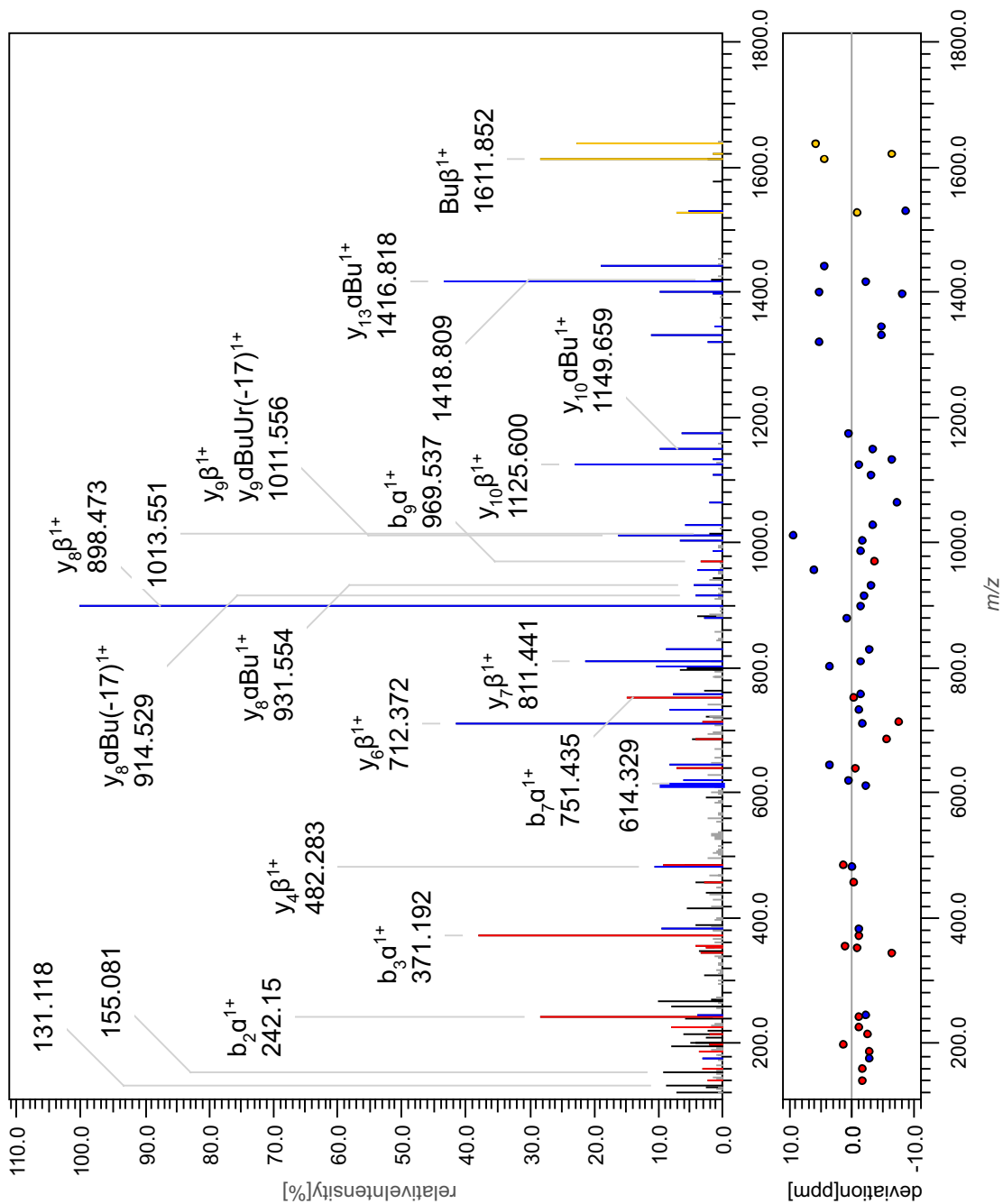
K134-K293

theor.Mass(M+H+): 3148.686
 PrecursorMass(M+H+): 3148.678
 Deviation: -2.48ppm
 m/z: 630.5414
 Charge: +5



K251-K278

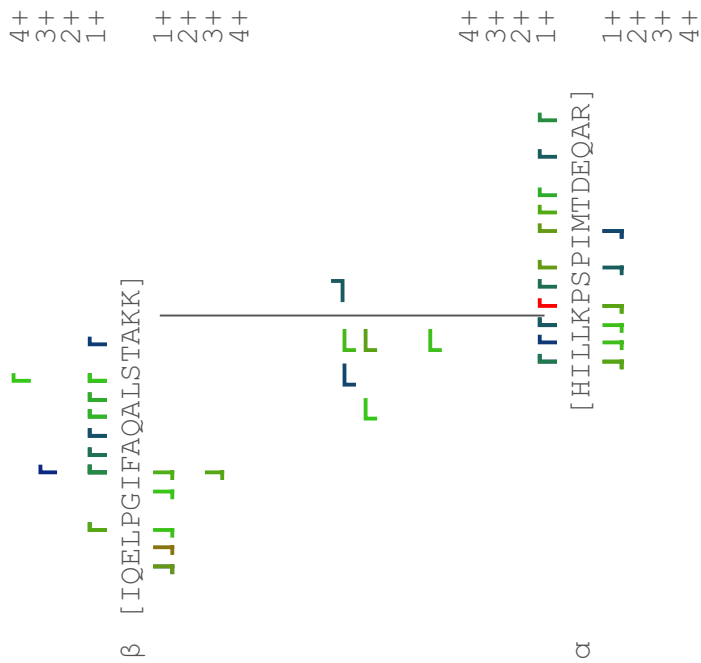
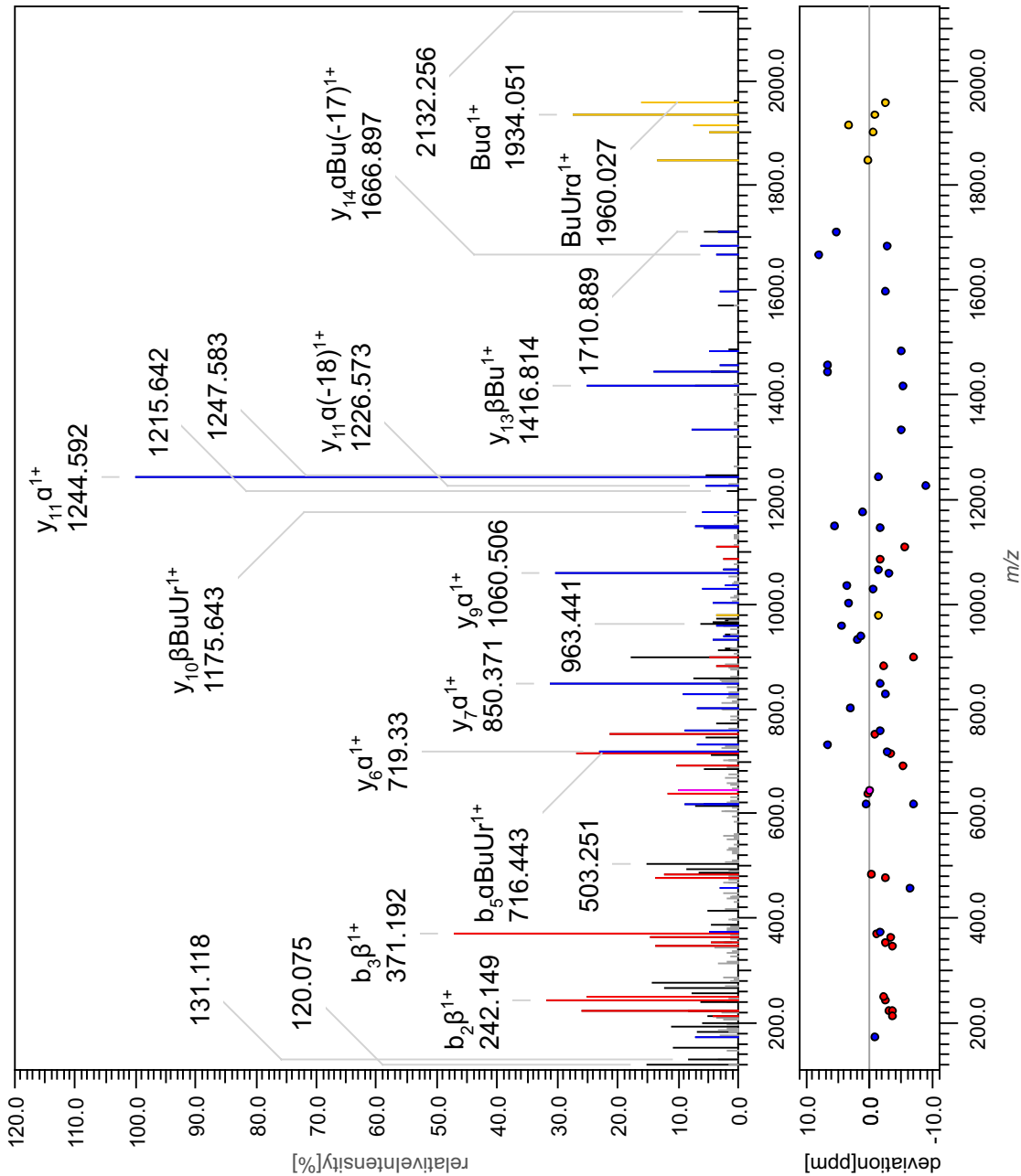
theor.Mass(M+H+): 3536.907
 PrecursorMass(M+H+): 3536.903
 Deviation: -1.19ppm
 m/z: 708.1864
 Charge: +5



β [GESKNI SVTEVHAR] 1+
 α [IQELPGIFAQALSTAKK] 1+
 β [GESKNI SVTEVHAR] 1+

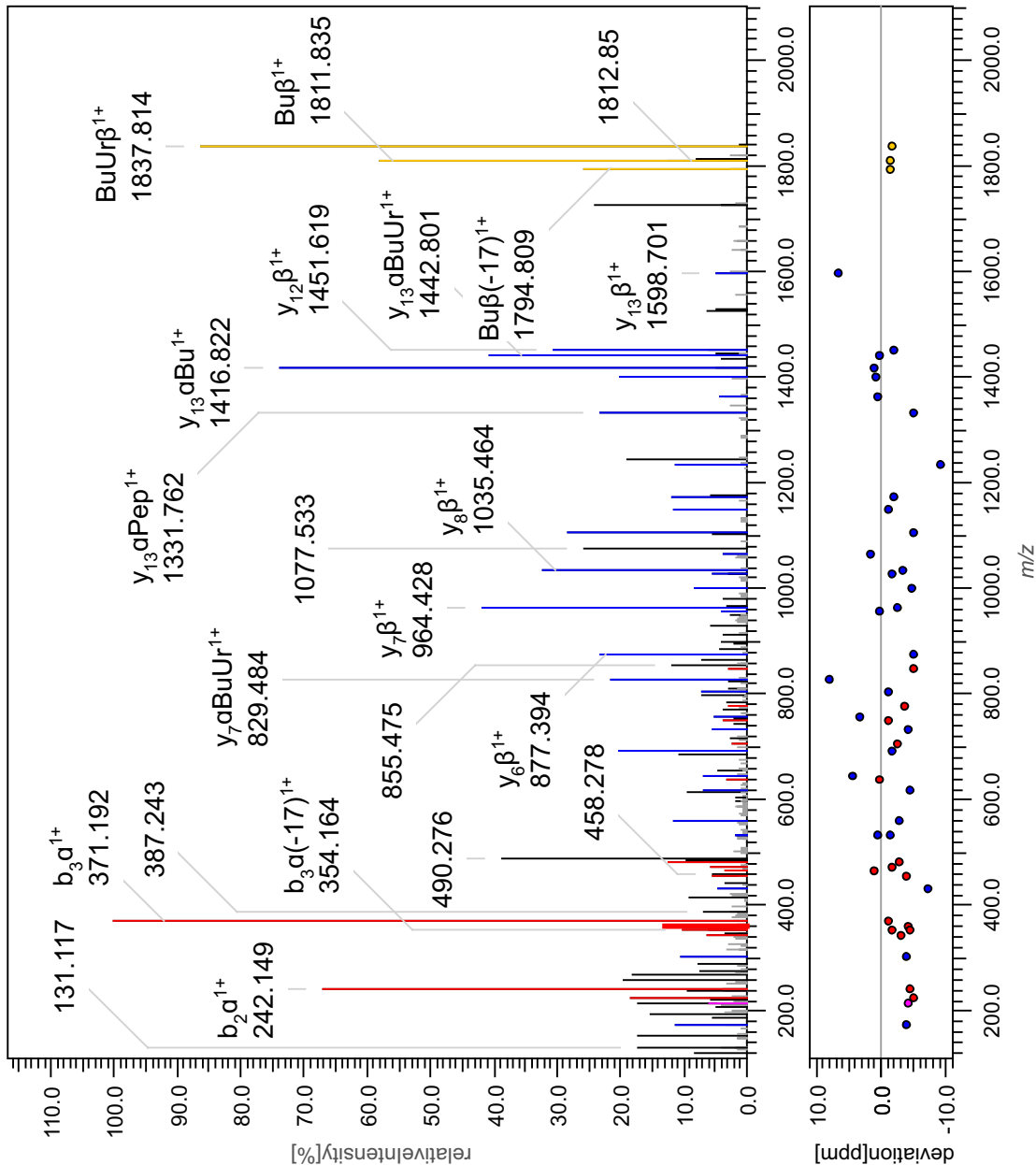
K251-K293

theor.Mass(M+H+): 3859.115
 PrecursorMass(M+H+): 3859.095
 Deviation: -5.08ppm
 m/z: 772.6249
 Charge: +5



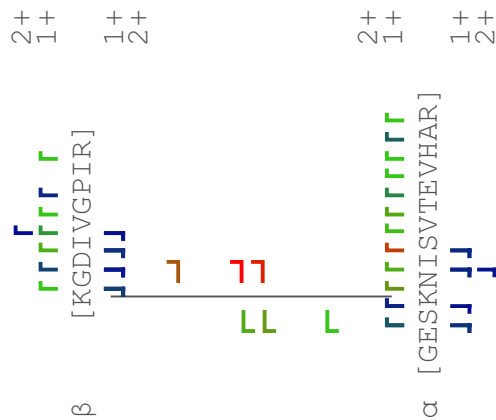
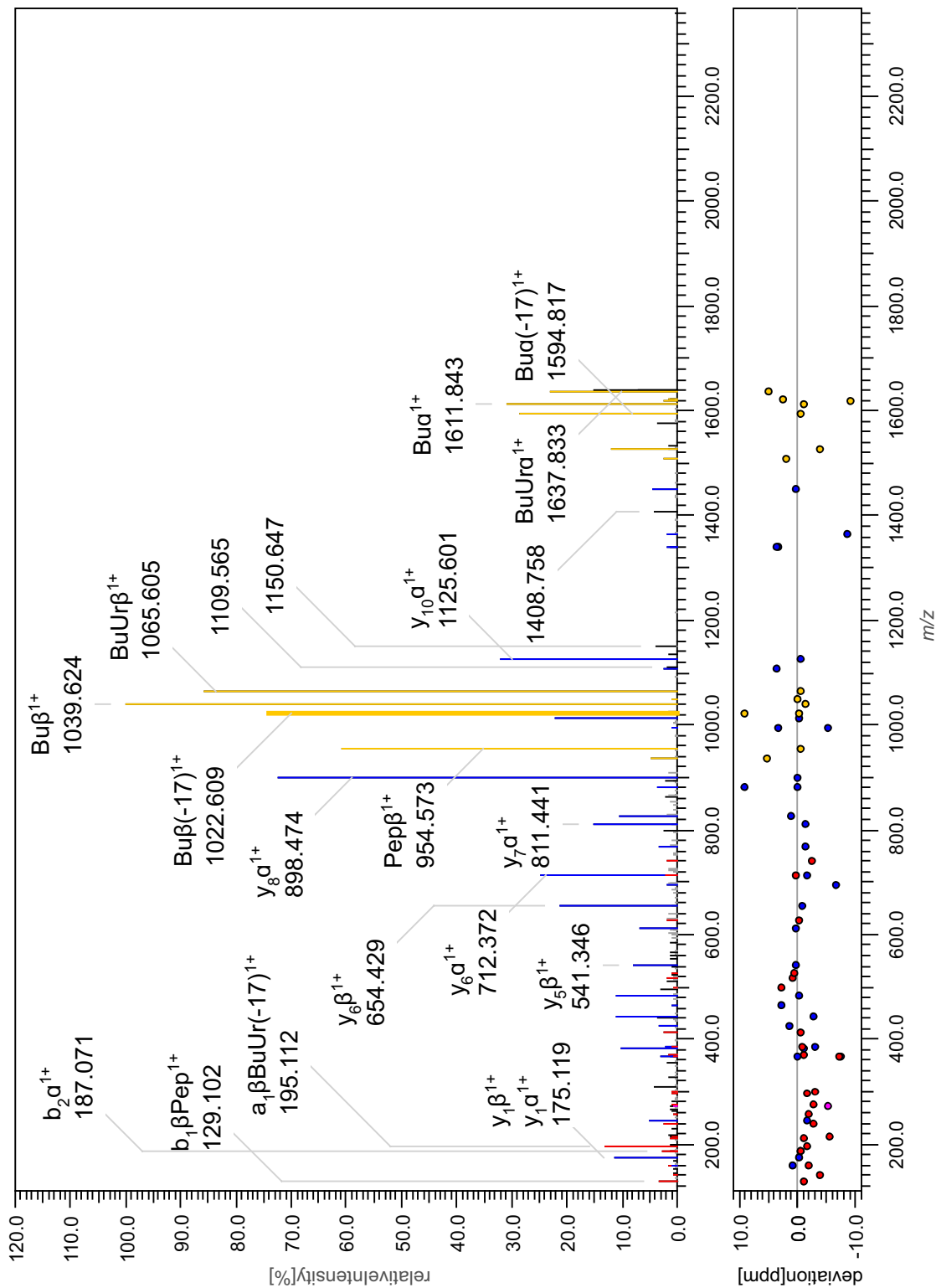
K251-K405

theor.Mass(M+H+): 3736.9
 PrecursorMass(M+H+): 3736.889
 Deviation: -3.14 ppm
 m/z: 934.9776
 Charge: +4



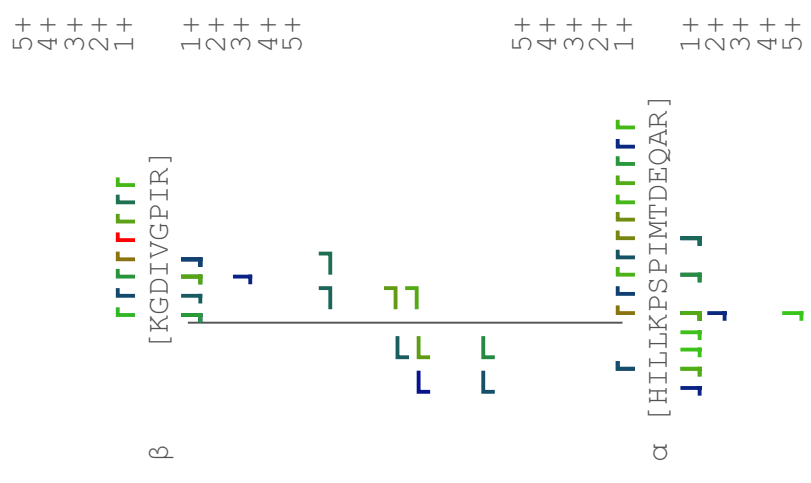
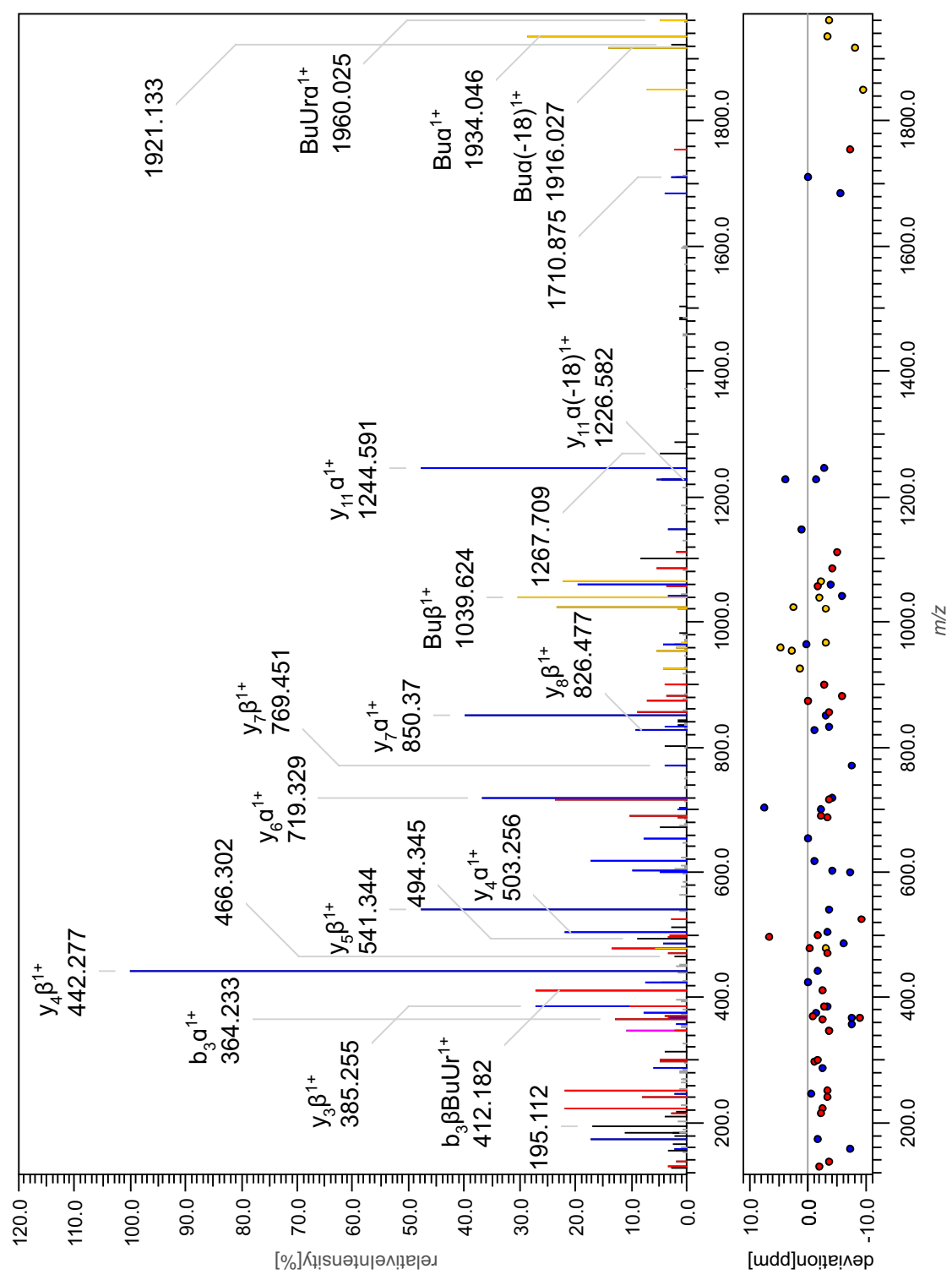
K252-K278

theor.Mass(M+H+): 2676.443
 PrecursorMass(M+H+): 2676.443
 Deviation: -0.08ppm
 m/z: 892.81903
 Charge: +3



K252-K293

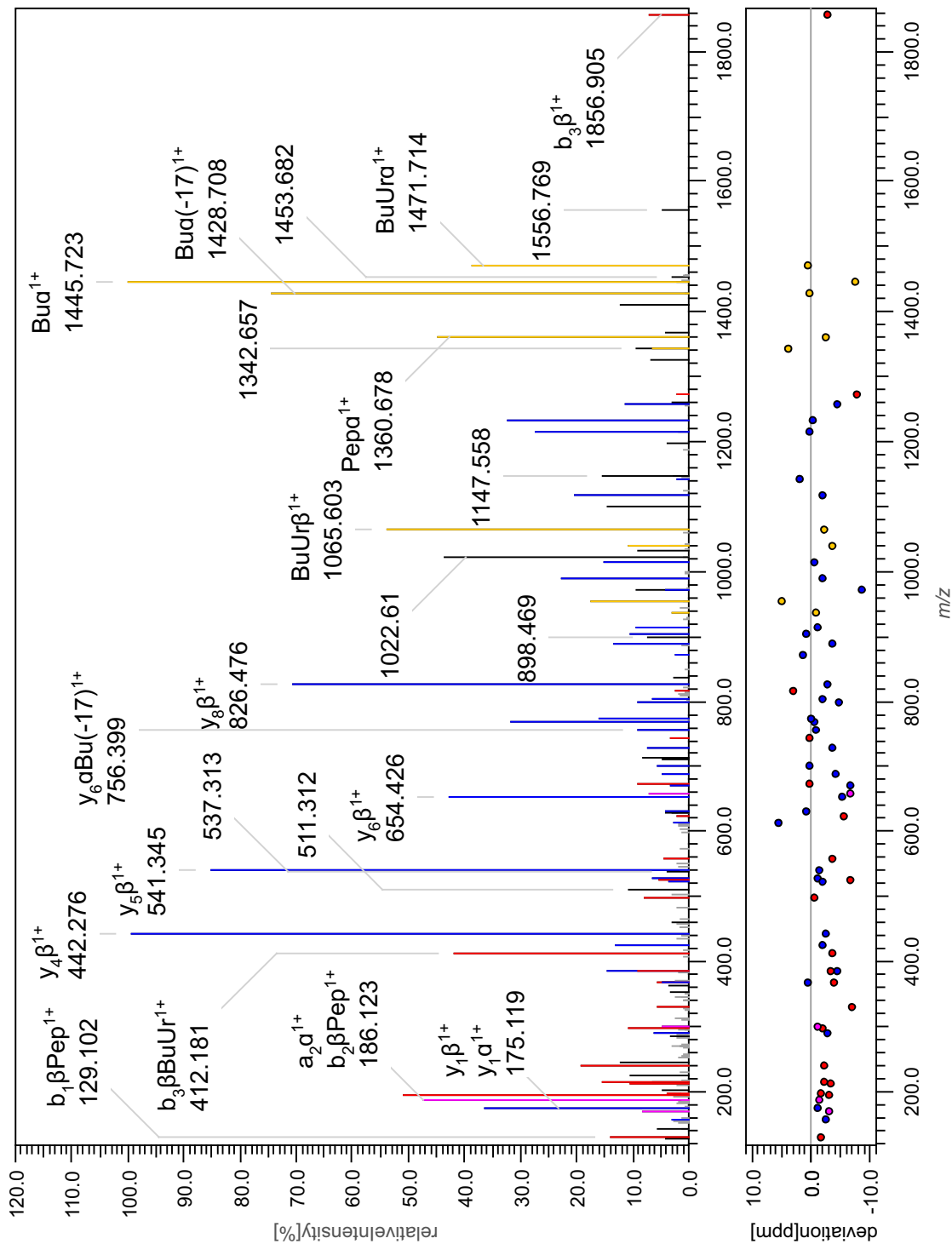
theor.Mass(M+H+): 2998.651
 PrecursorMass(M+H+): 2998.641
 Deviation: -3.35ppm
 m/z: 600.53394
 Charge: +5



5+ 4+ 3+ 2+ 1+ 1+ 2+ 3+ 4+ 5+ 5+ 4+ 3+ 2+ 1+ 1+ 2+ 3+ 4+ 5+

K252-K394

theor.Mass(M+H+):2510.332
 PrecursorMass(M+H+):2510.329
 Deviation:-1.34ppm
 m/z:628.33765
 Charge:+4



3+
2+
1+

β [KGDIVGPIR]

3+
2+
1+

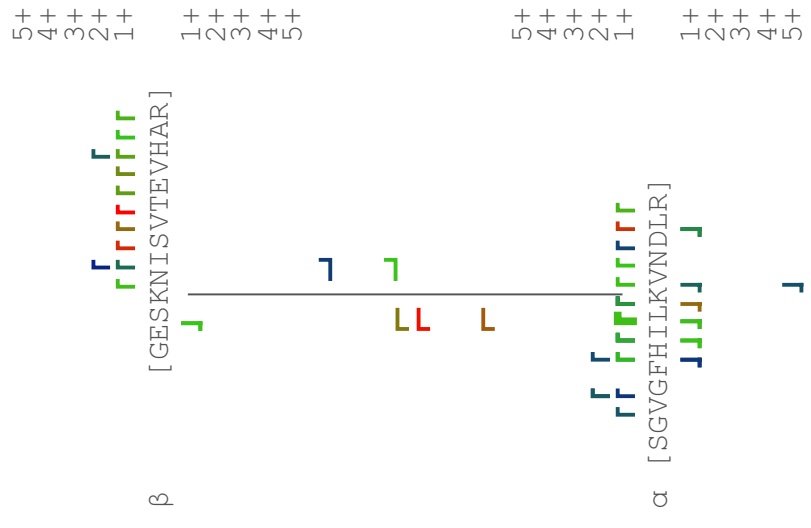
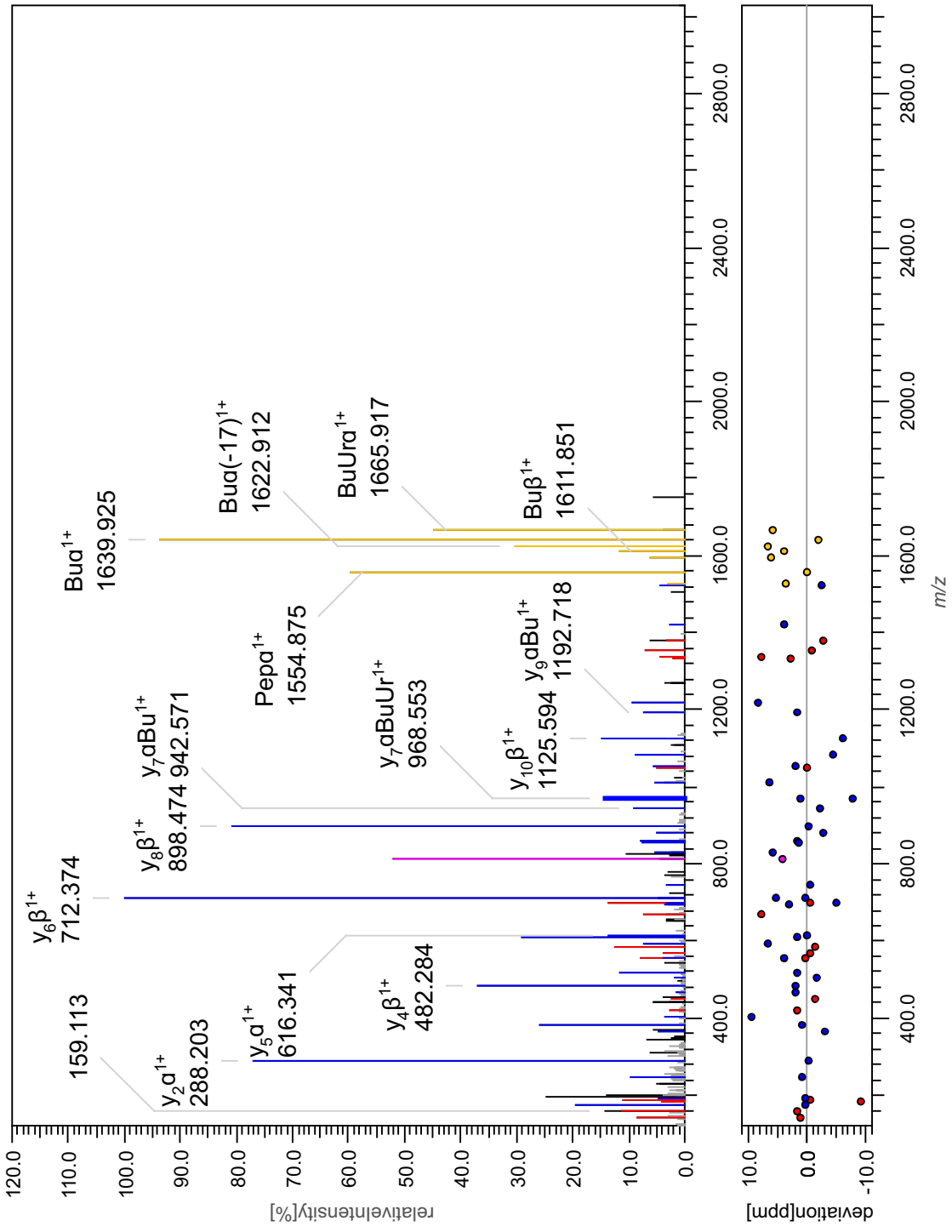
α [NVDKTTDAAQKDR]

1+
2+
3+

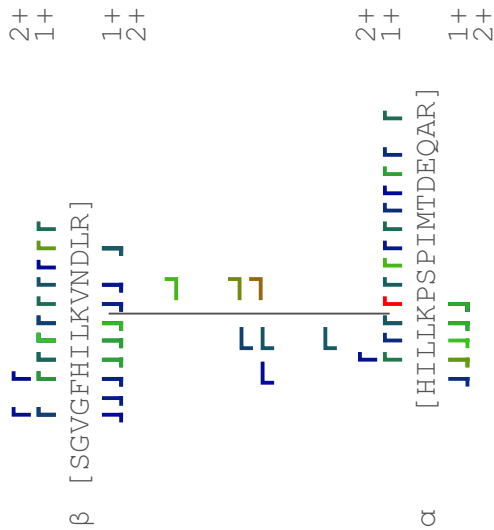
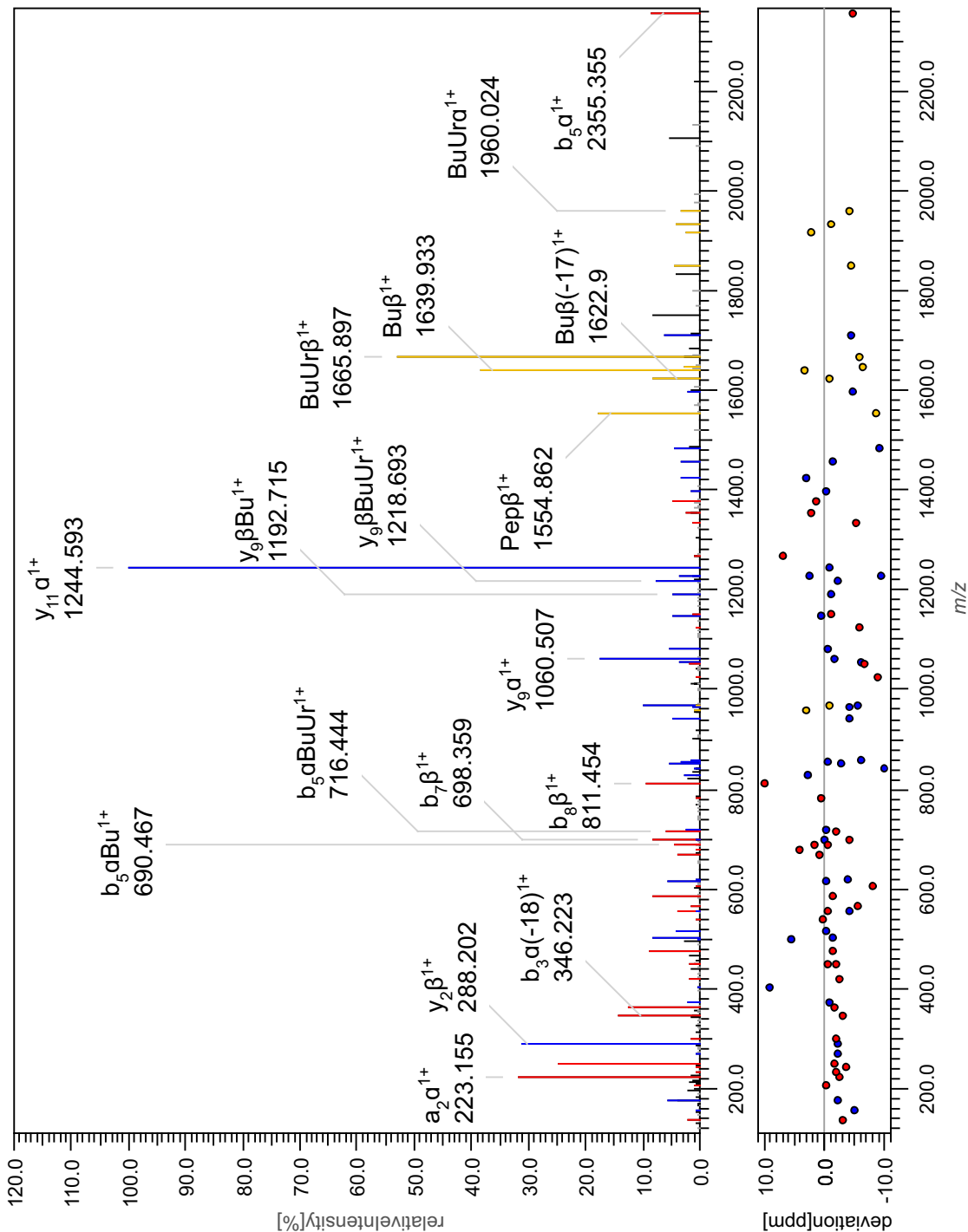
0% rel.intensity 100%

K269-K278

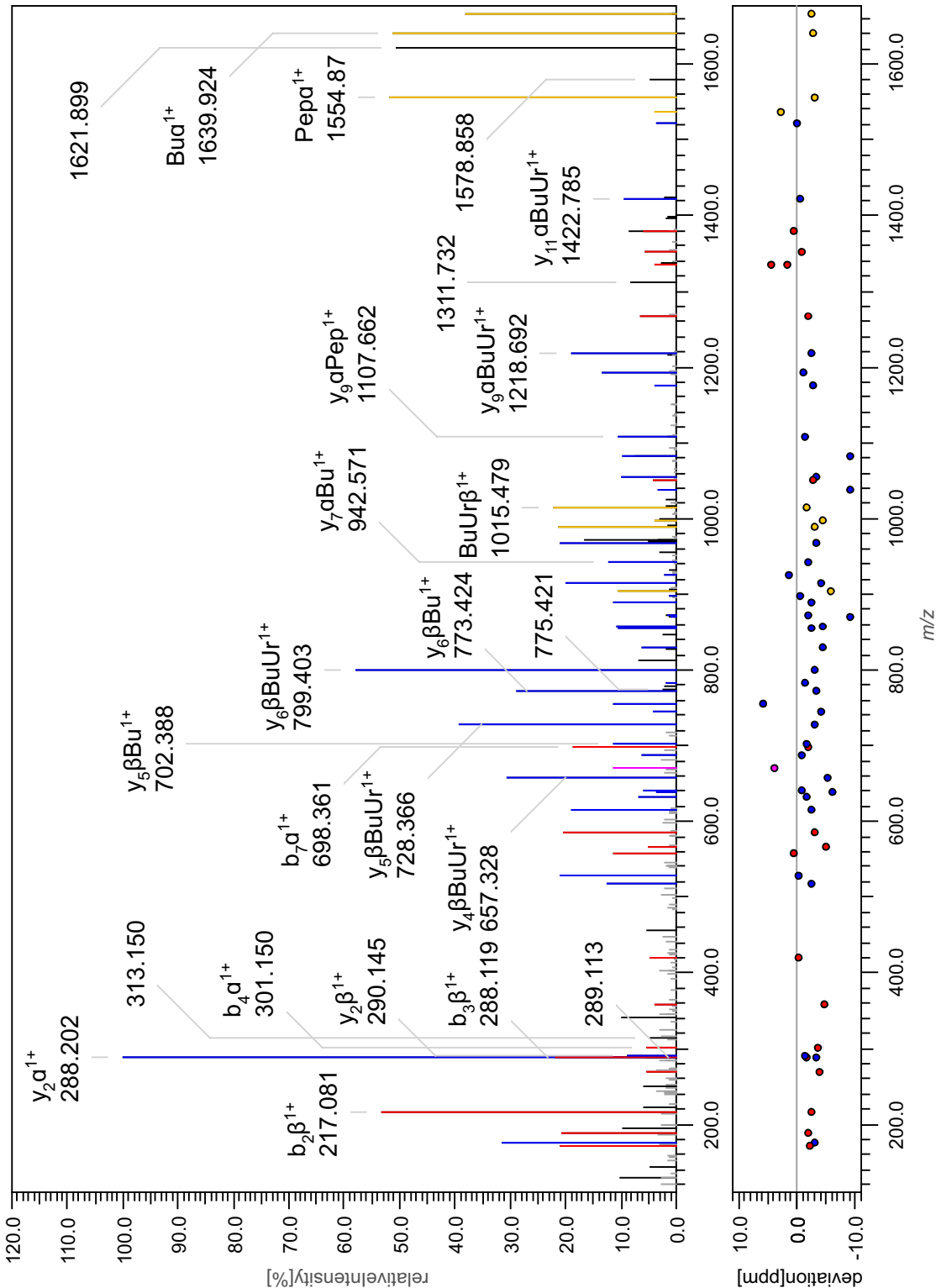
theor.Mass(M+H+): 3276.745
 PrecursorMass(M+H+): 3276.743
 Deviation: -0.63ppm
 m/z: 656.15436
 Charge: +5



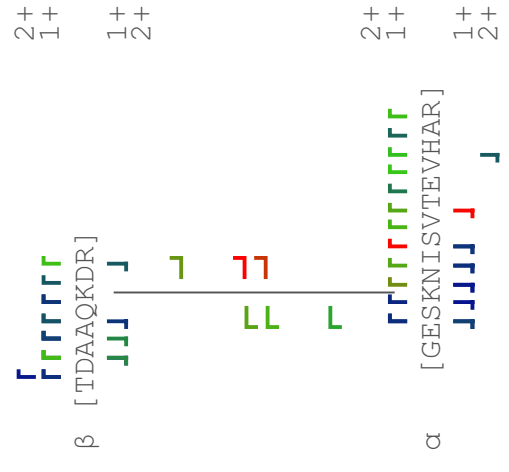
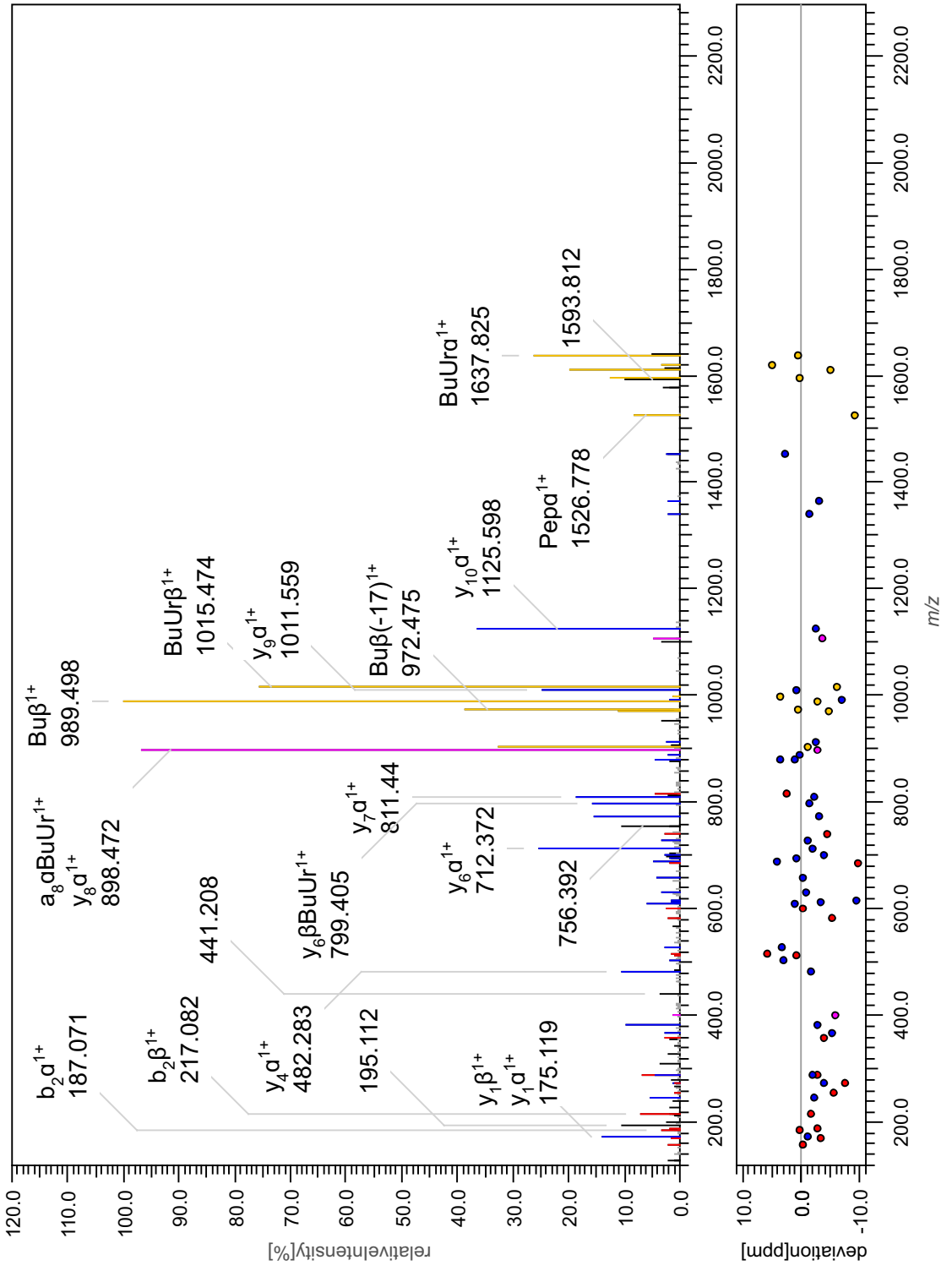
theor.Mass(M+H+): 3598.953
 PrecursorMass(M+H+): 3598.947
 Deviation: -1.57 ppm
 m/z: 900.4922
 Charge: +4



theor.Mass(M+H+):2654.401
 PrecursorMass(M+H+):2654.394
 Deviation:-2.44ppm
 m/z:664.35406
 Charge:+4

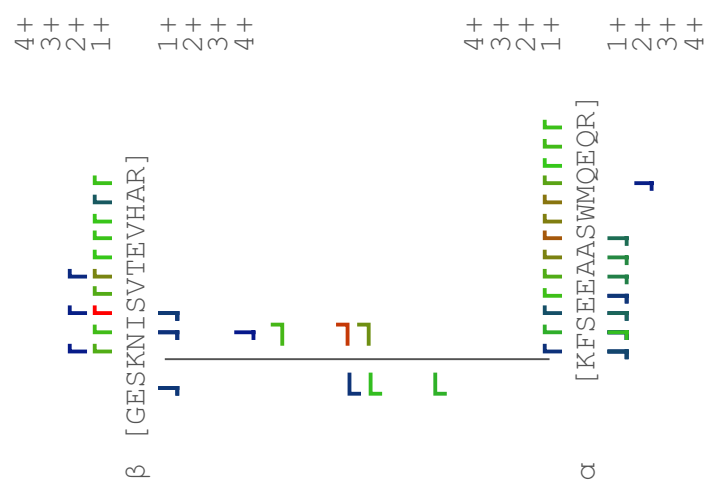
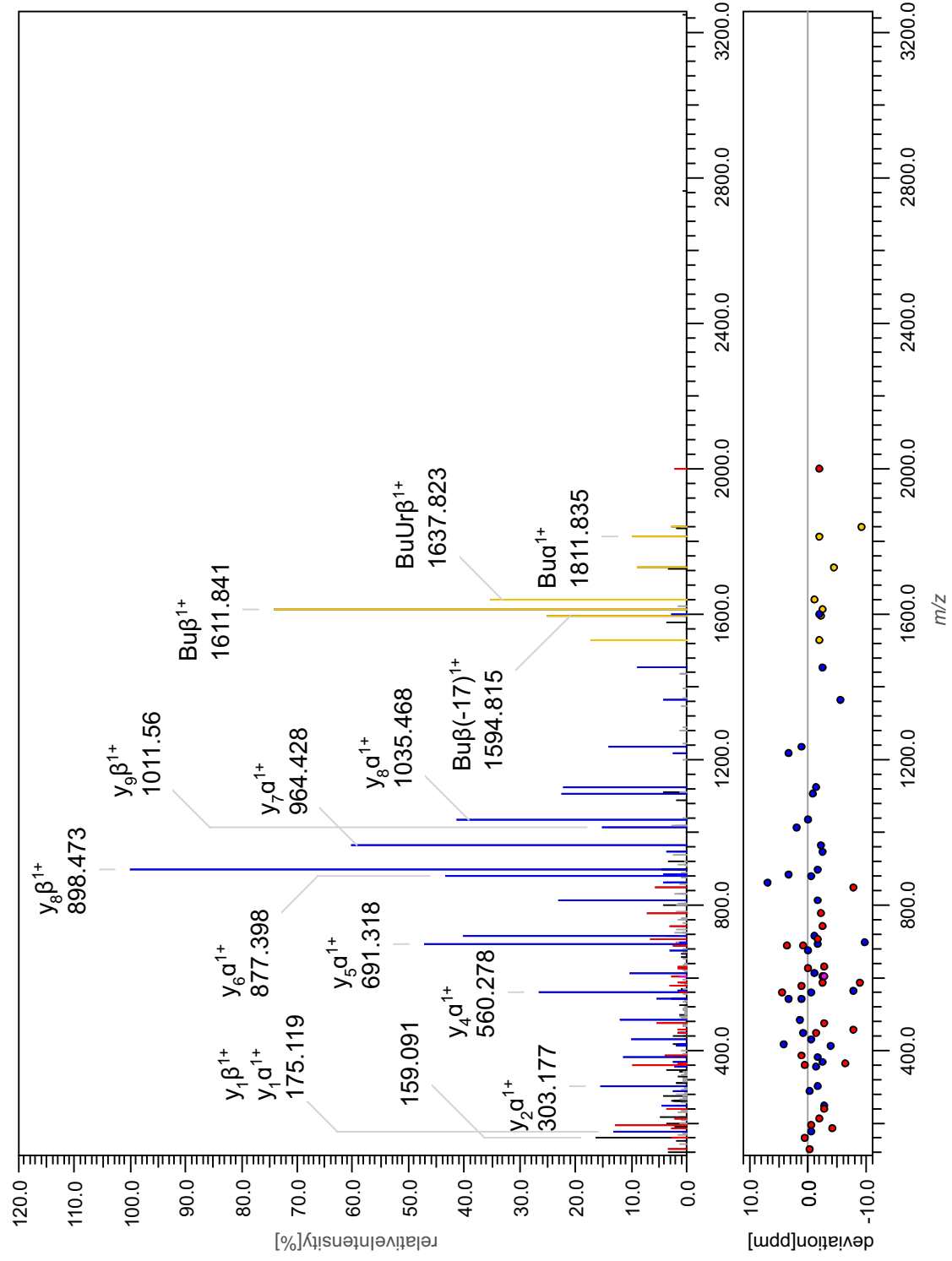


theor.Mass(M+H+):2626.318
 PrecursorMass(M+H+):2626.312
 Deviation-2.44ppm
 m/z:876.1087
 Charge:+3

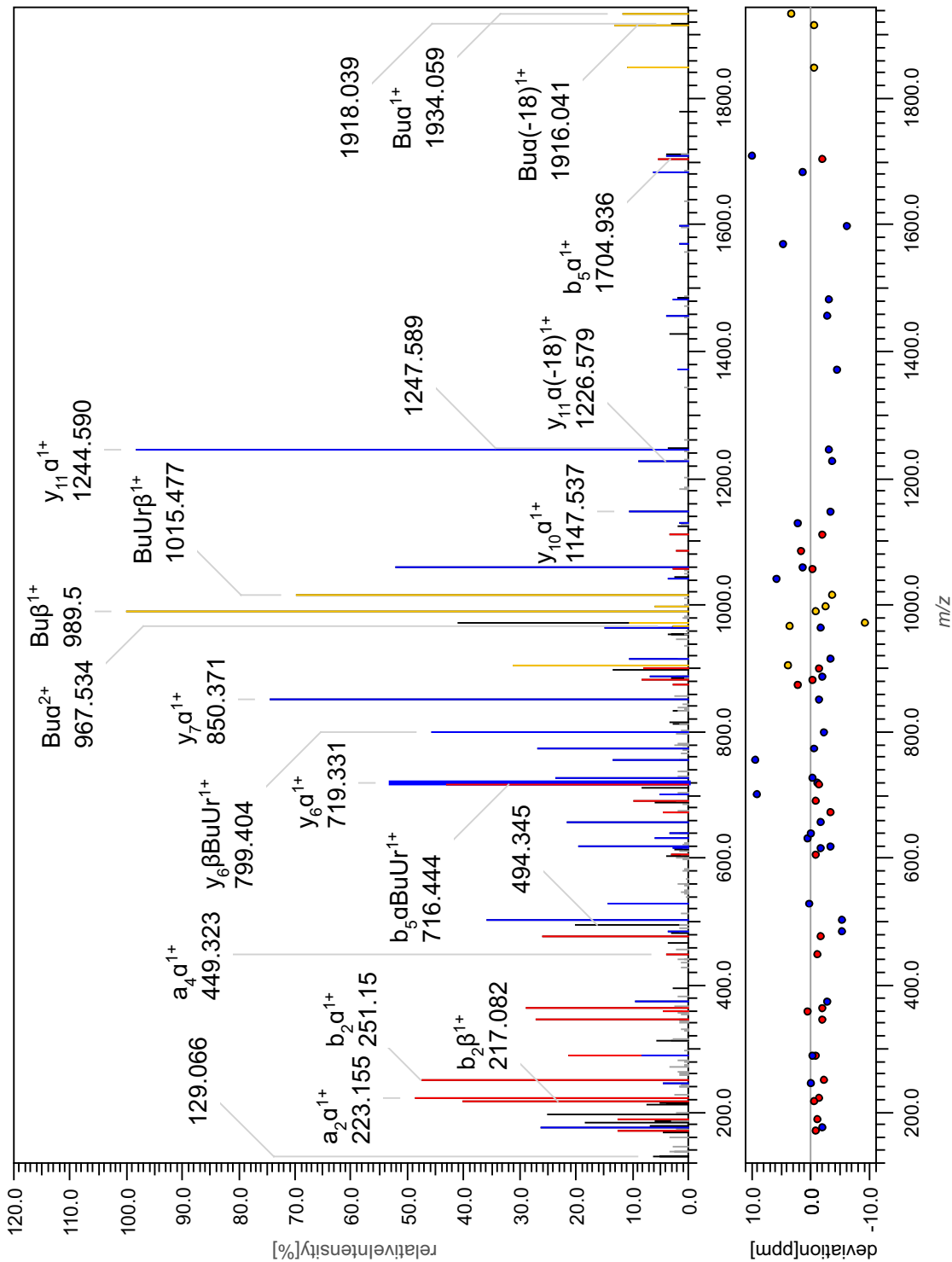


K278-K405

theor.Mass(M+H+): 3448.655
 PrecursorMass(M+H+): 3448.65
 Deviation: -1.52ppm
 m/z: 862.9179
 Charge: +4

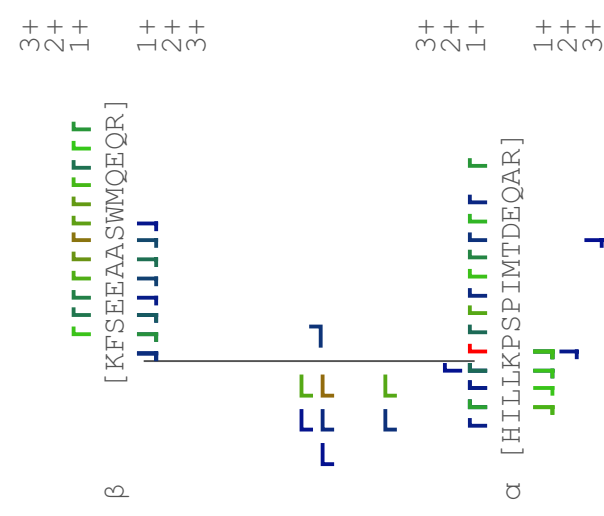
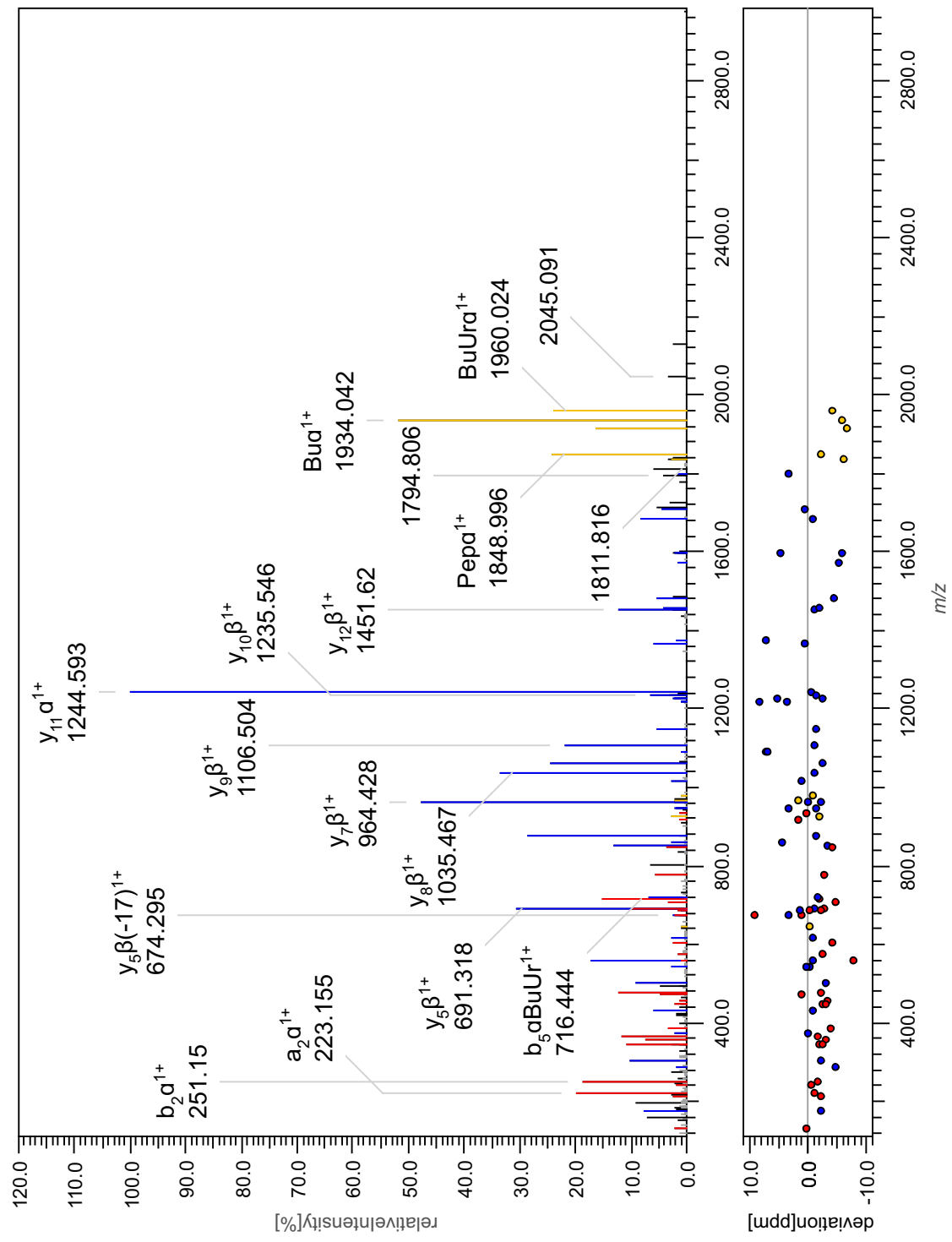


theor.Mass(M+H+):2948.526
 PrecursorMass(M+H+):2948.52
 Deviation-2.0ppm
 m/z:737.88544
 Charge:+4



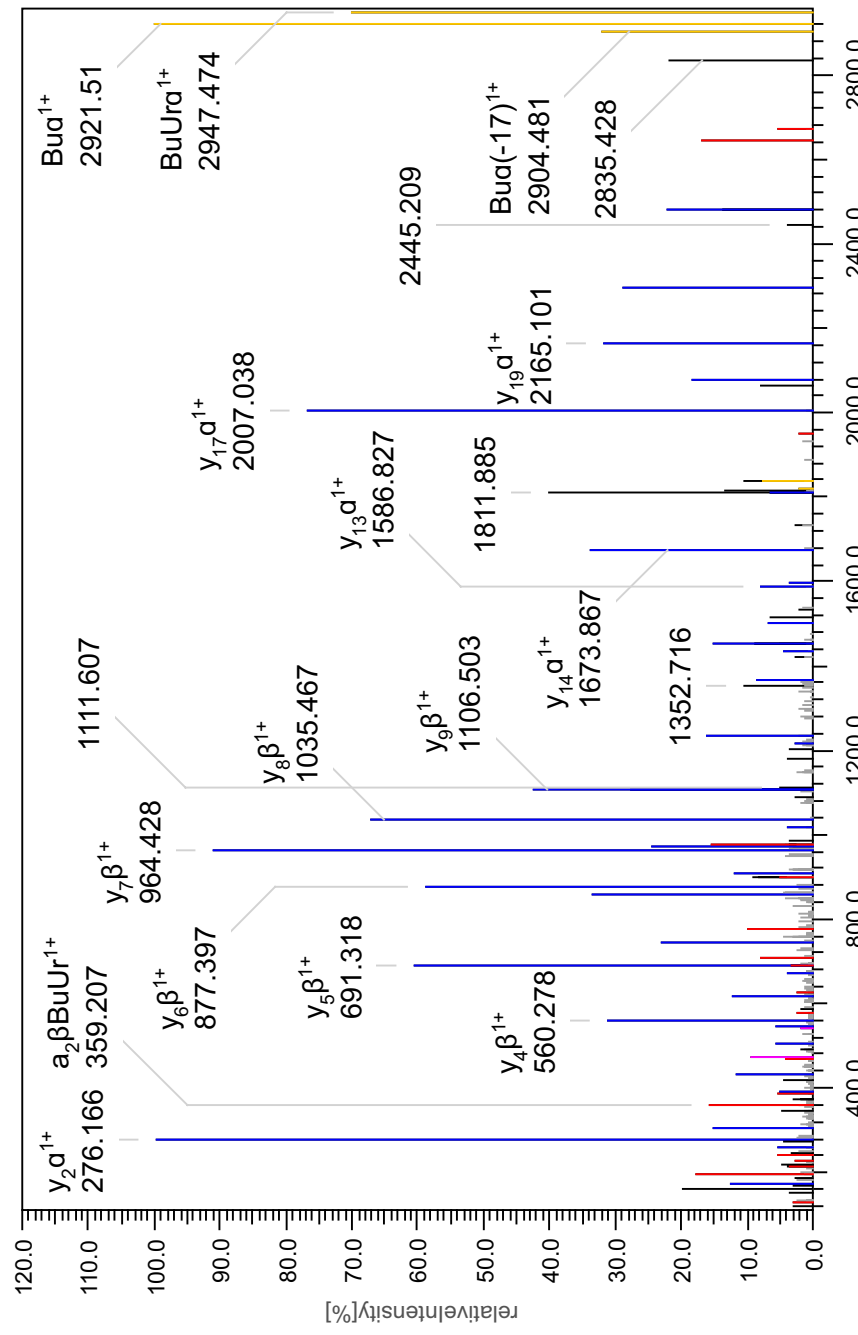
K293-K405

theor.Mass(M+H+):3770.863
 PrecursorMass(M+H+):3770.854
 Deviation:-2.42ppm
 m/z:943.4689
 Charge:+4



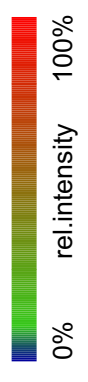
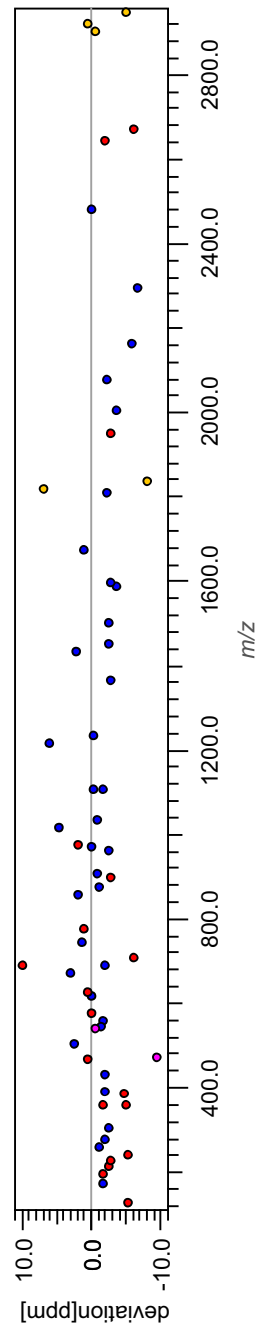
K362-K405

theor.Mass(M+H+): 4758.319
 PrecursorMass(M+H+): 4758.302
 Deviation: -3.57 ppm
 m/z: 952.46625
 Charge: +5



β [KFSEEAASMMQEQR]
 5+
 4+
 3+
 2+
 1+
 1+
 2+
 3+
 4+
 5+

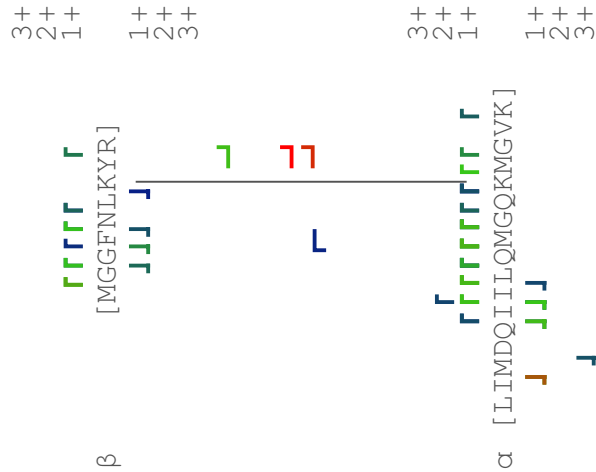
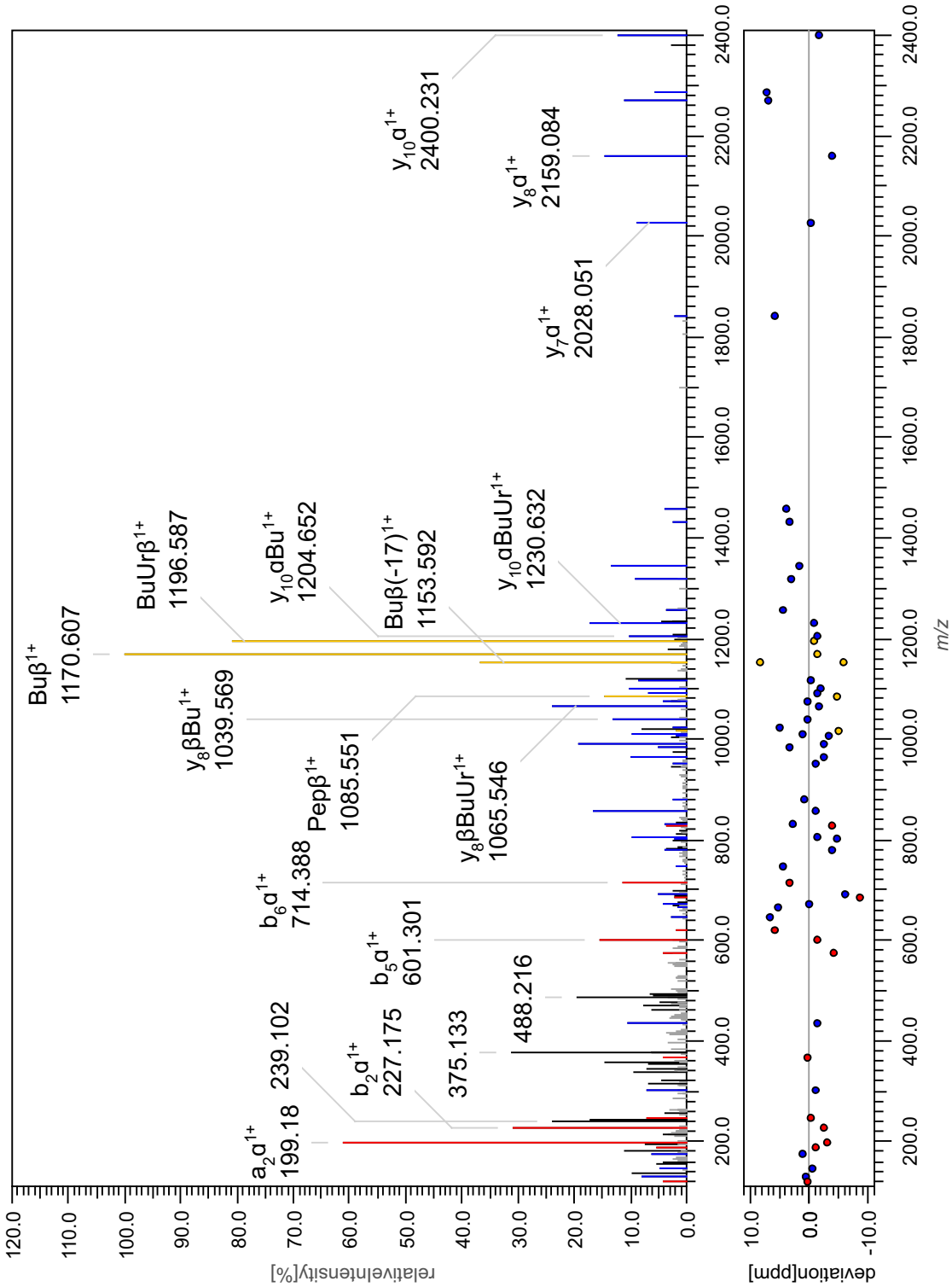
α [LNKGQMSAPVHSSFGWHLIELLDTR]
 5+
 4+
 3+
 2+
 1+
 1+
 2+
 3+
 4+
 5+



XL-MS spectra of DSBU crosslinks detected between SurA and OmpX.

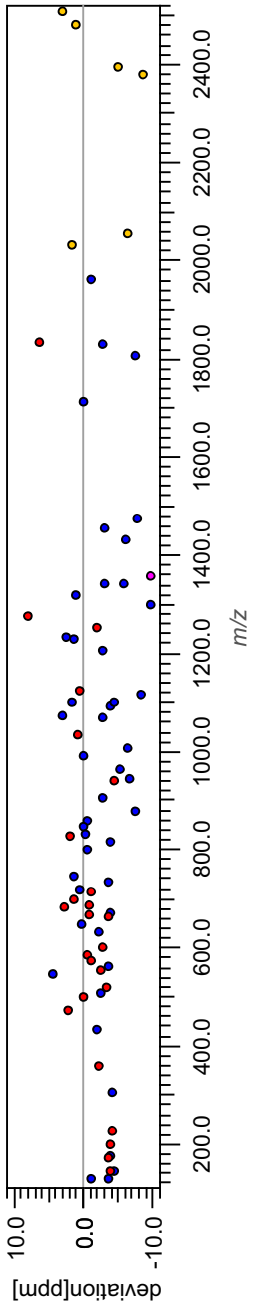
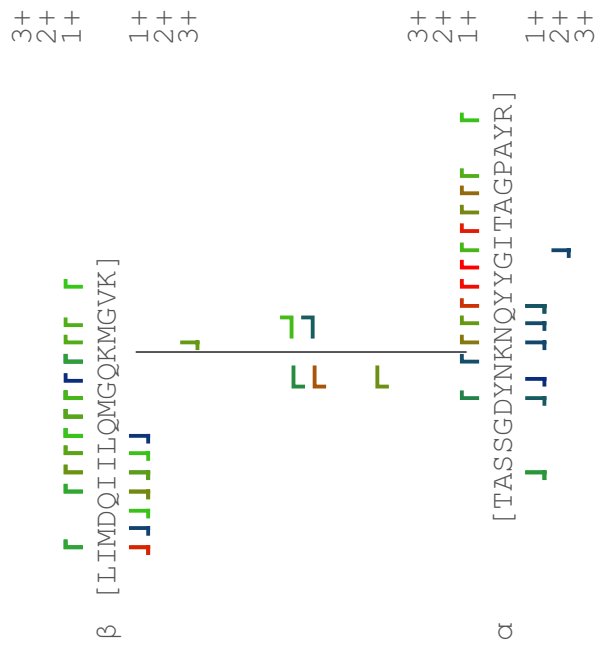
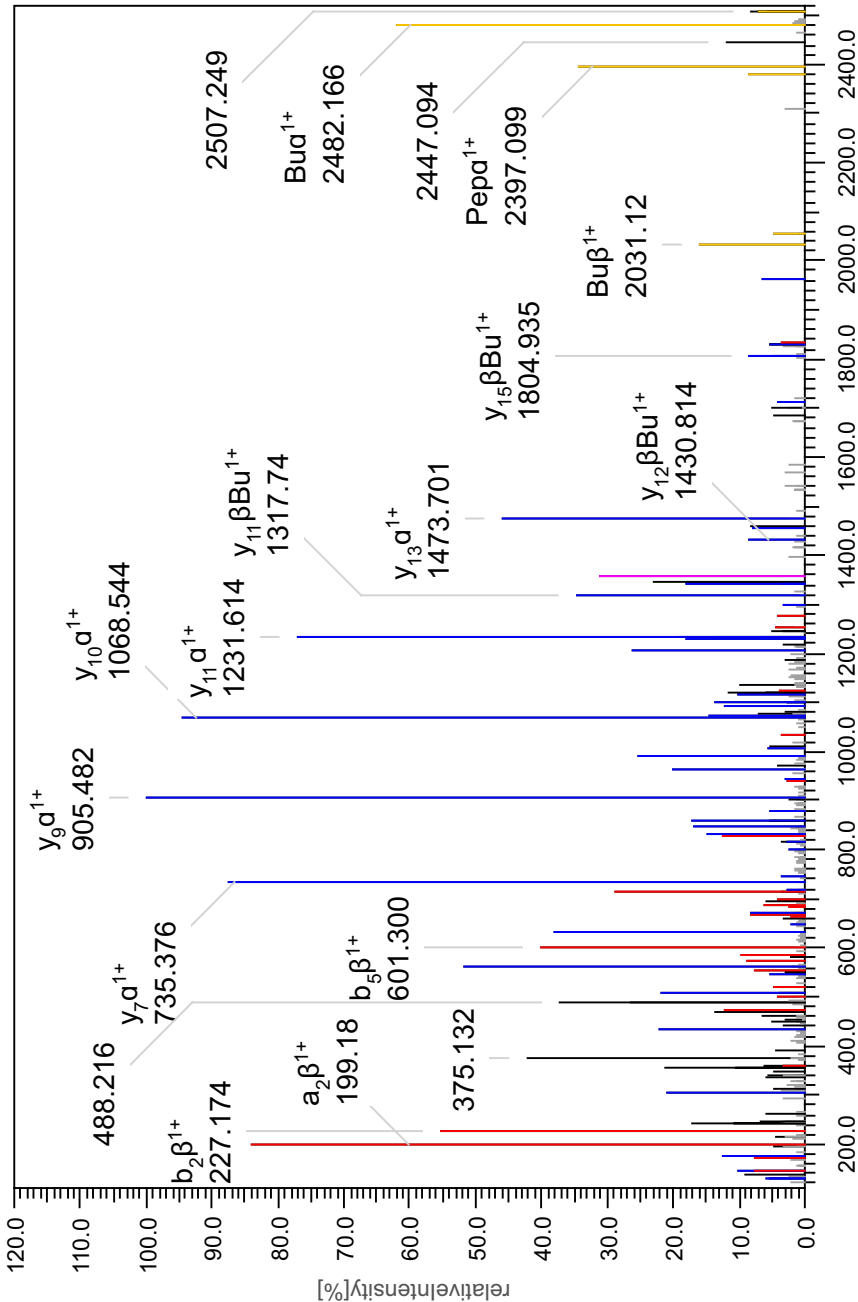
SurA K87
OmpX K50

theor.Mass(M+H+):3226.697
PrecursorMass(M+H+):3226.691
Deviation:-1.91ppm
m/z:807.4282
Charge:+4



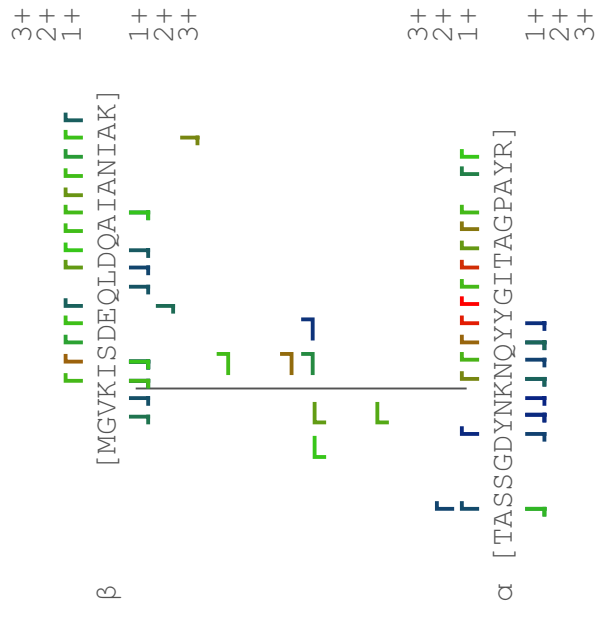
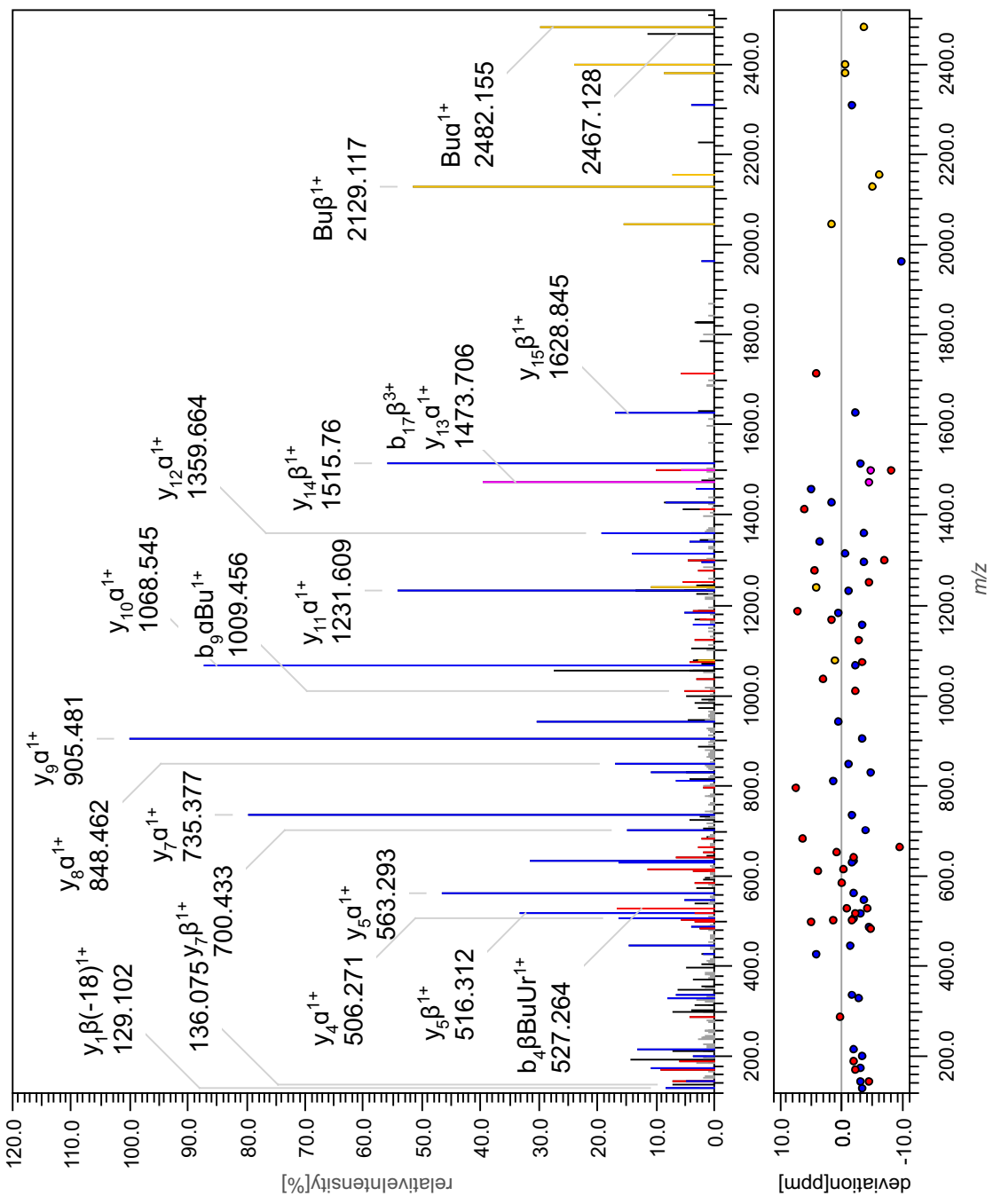
SurA K87
OmpX K82

theor.Mass(M+H+):4538.252
PrecursorMass(M+H+):4538.231
Deviation-4.63ppm
m/z:1135.3131
Charge:+4



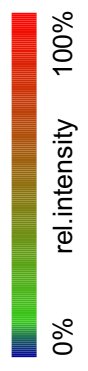
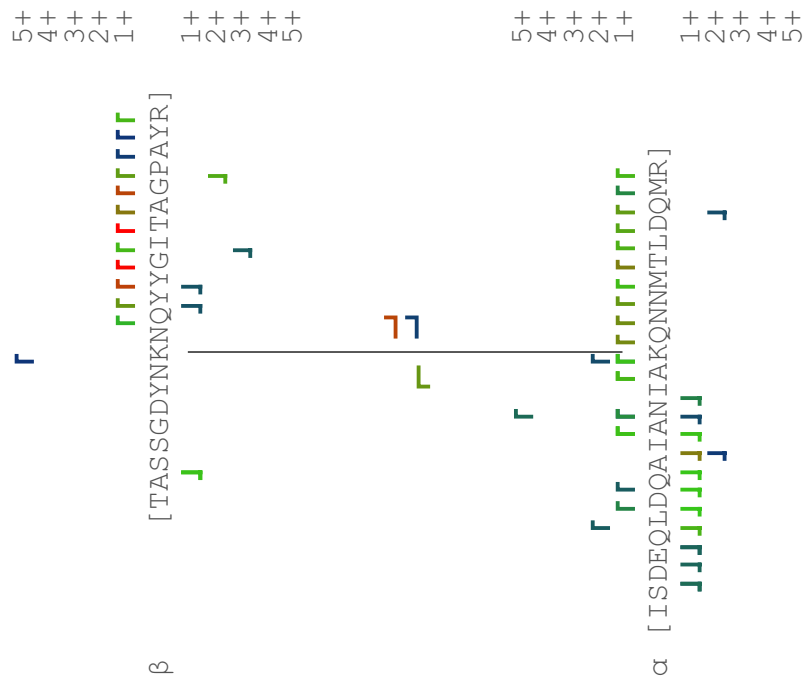
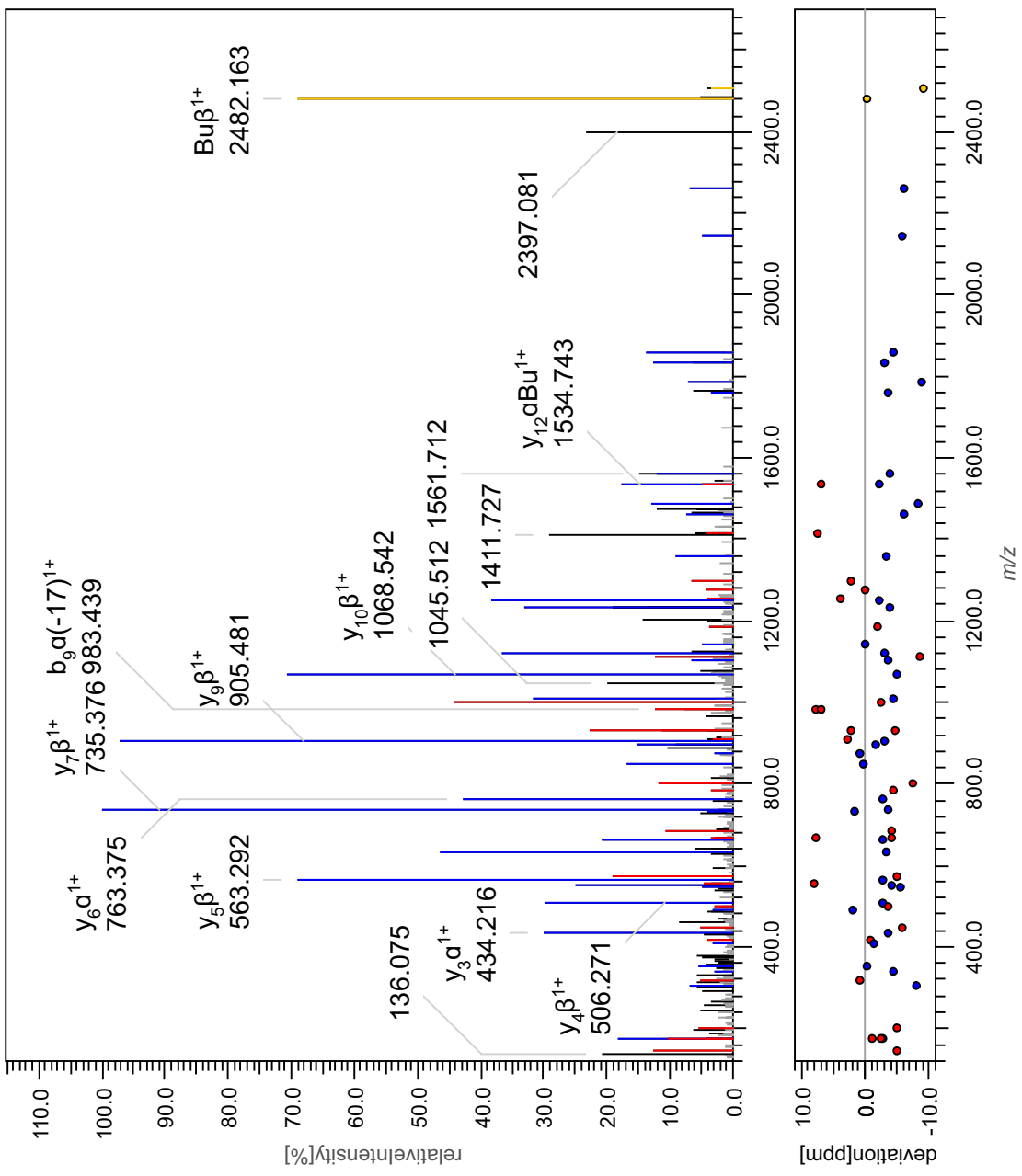
SurA K91
OmpX K82

theor.Mass(M+H+):4636.262
PrecursorMass(M+H+):4636.27
Deviation1.67ppm
m/z:1159.823
Charge:+4



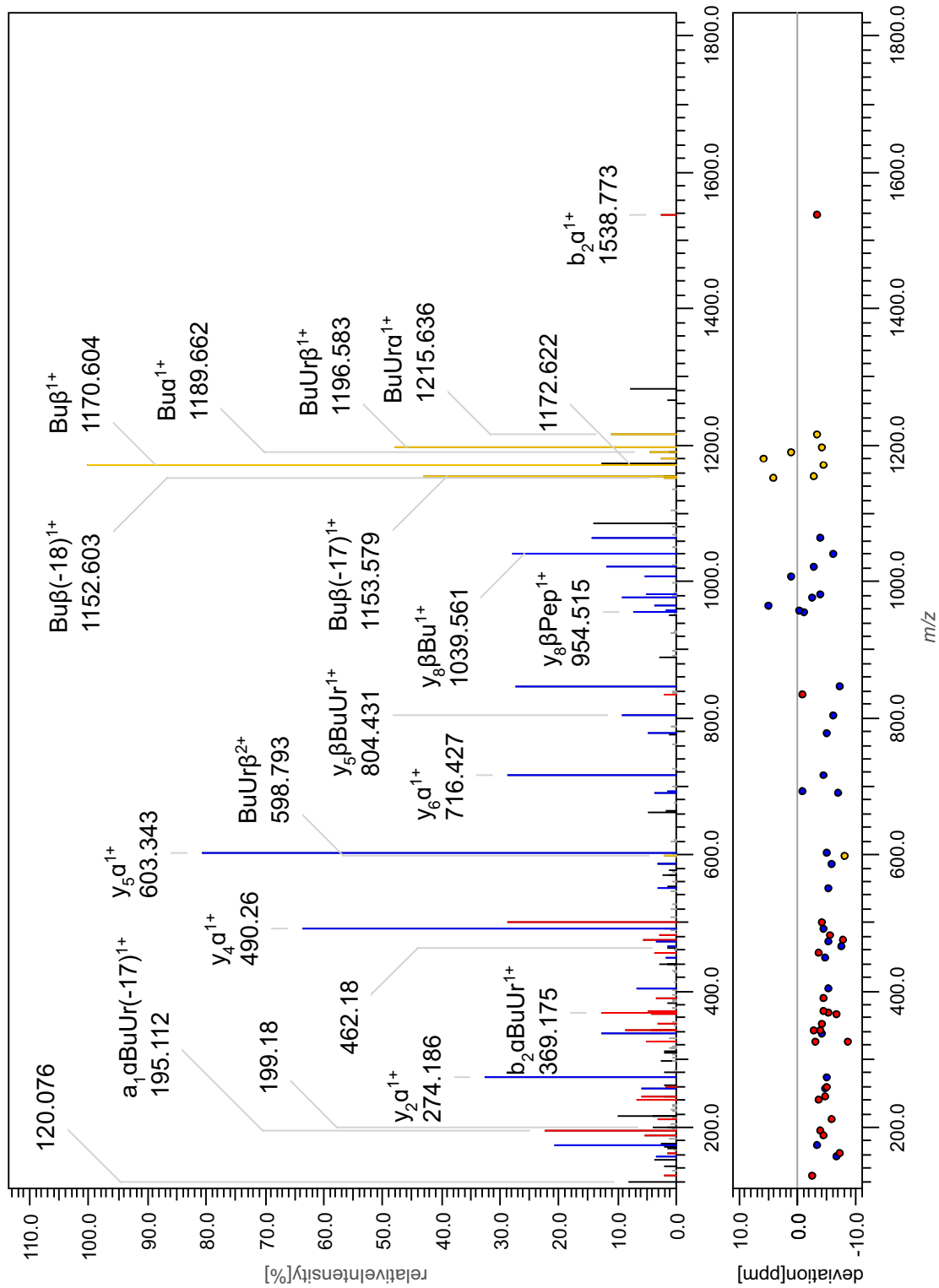
SurA K106
OmpX K82

theor.Mass(M+H+):5452.581
PrecursorMass(M+H+):5452.572
Deviation:-1.55ppm
m/z:1091.3203
Charge:+5



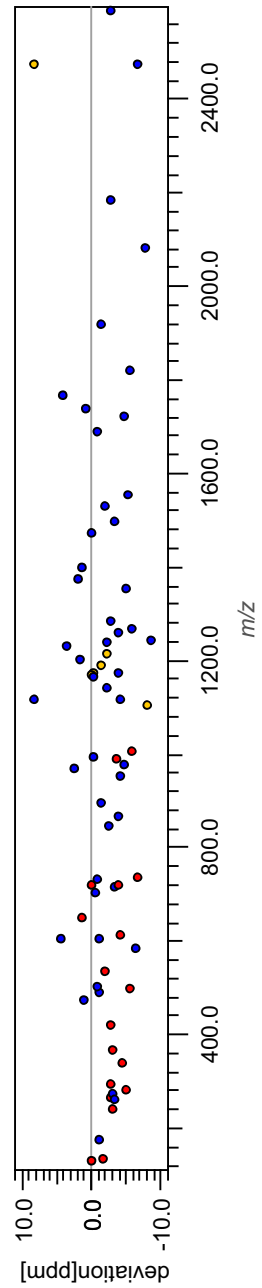
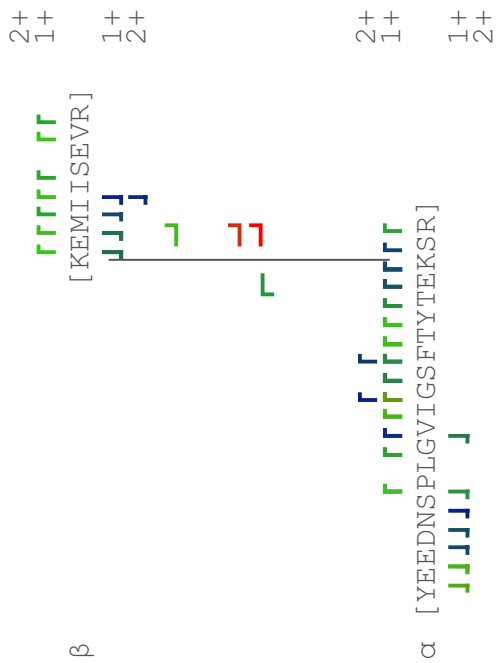
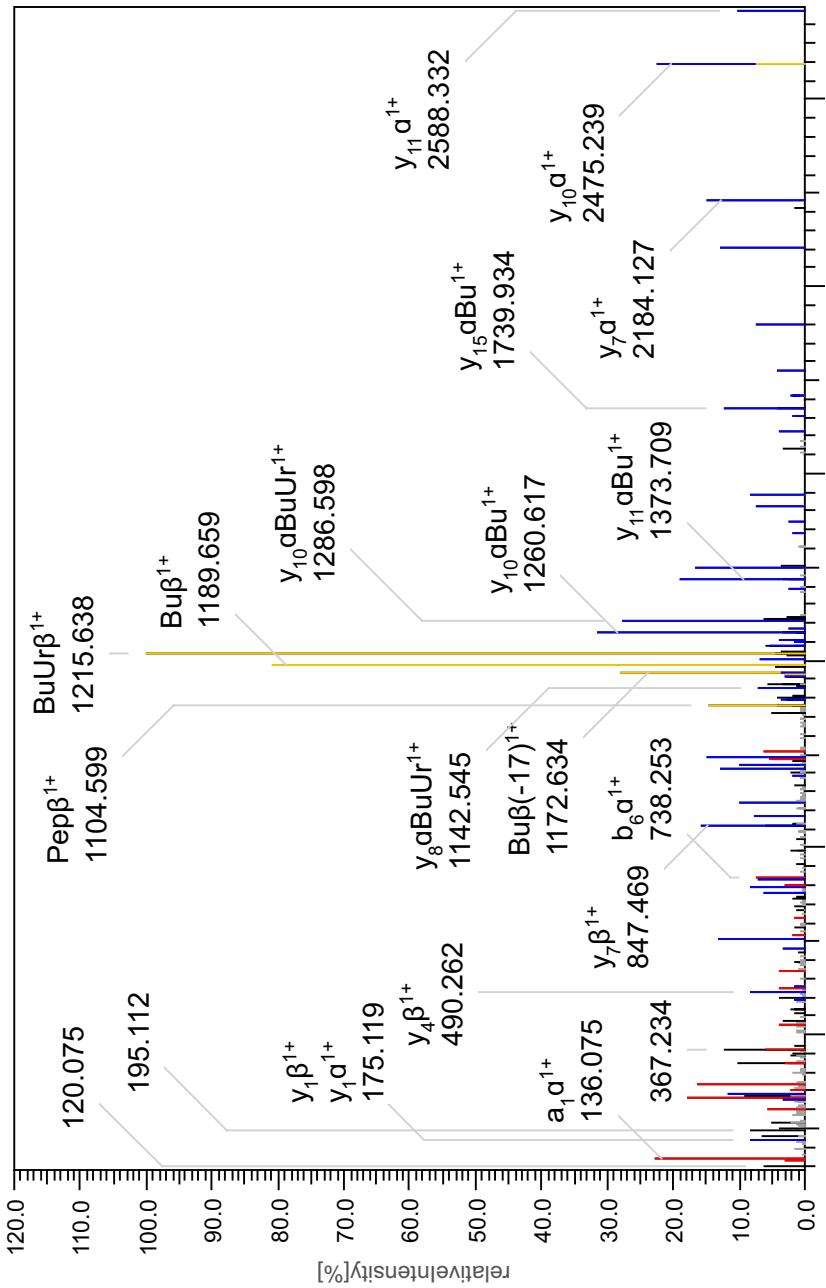
SurA K135
OmpX K50

theor.Mass(M+H+):2385.242
PrecursorMass(M+H+):2385.228
Deviation-5.85ppm
m/z:597.0624
Charge:+4



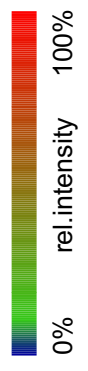
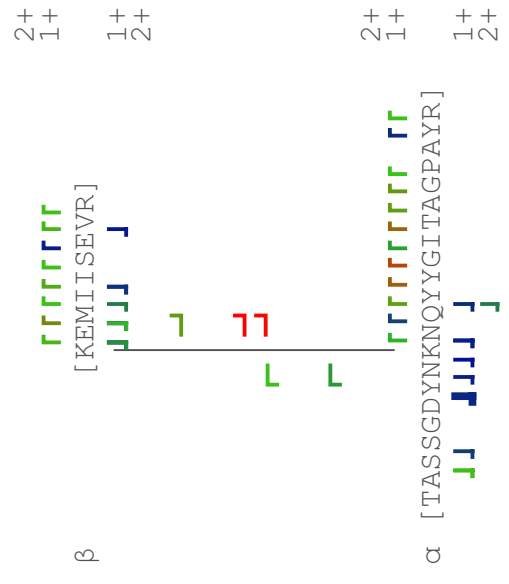
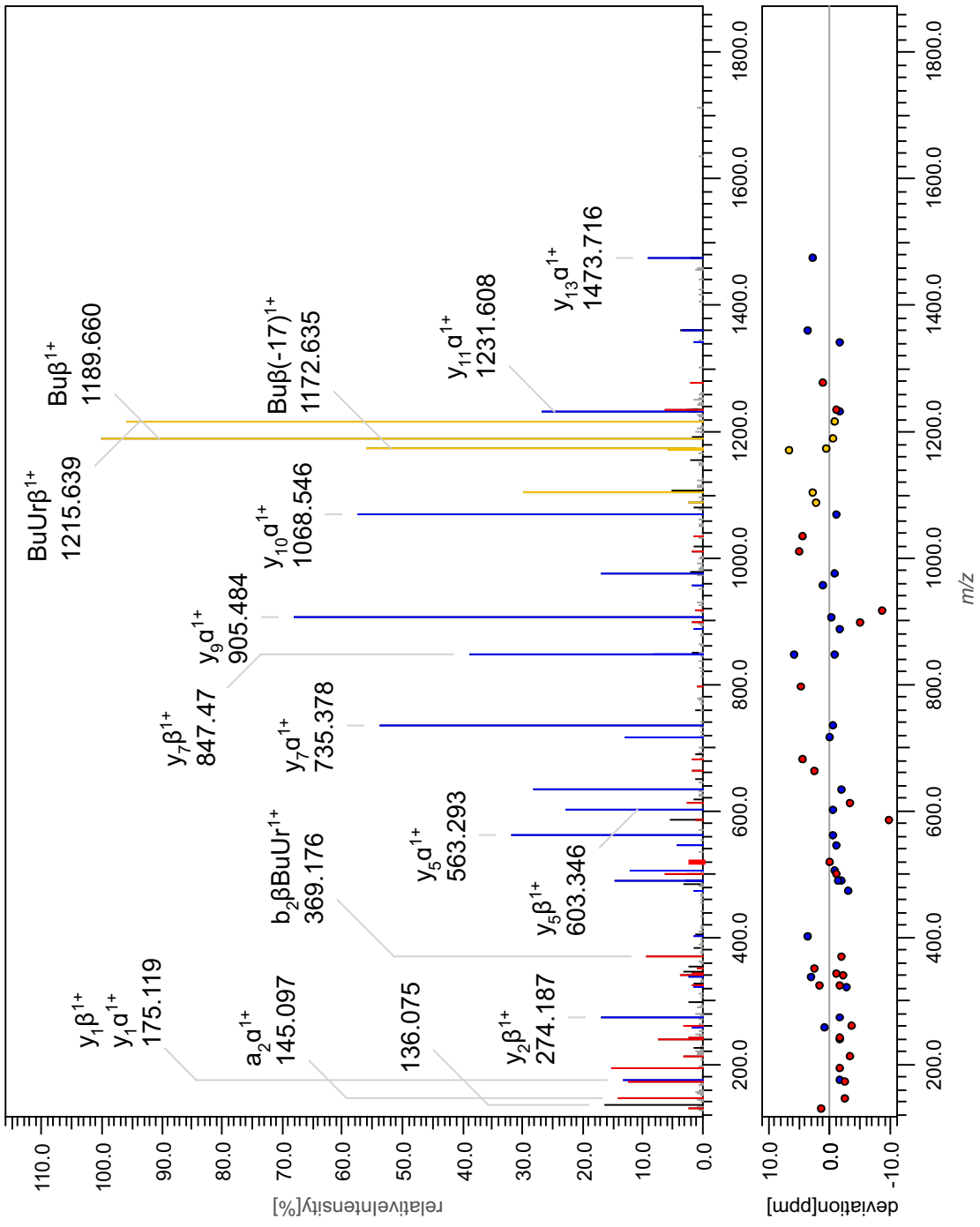
SurA K135
OmpX K71

theor.Mass(M+H+):3691.816
PrecursorMass(M+H+):3691.825
Deviation2.43ppm
m/z:923.7117
Charge:+4



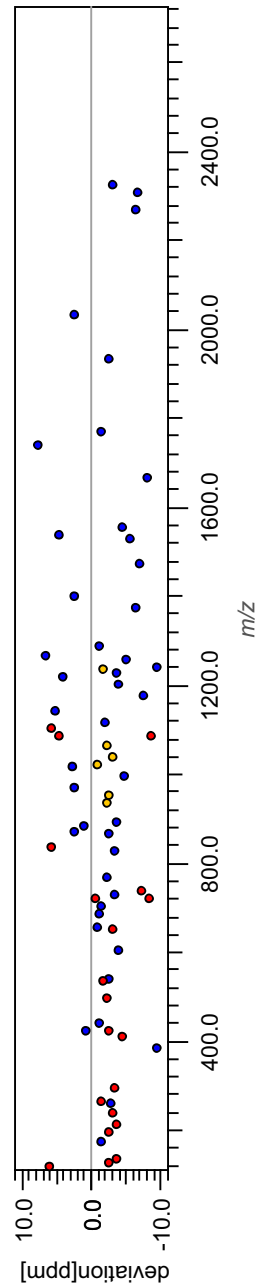
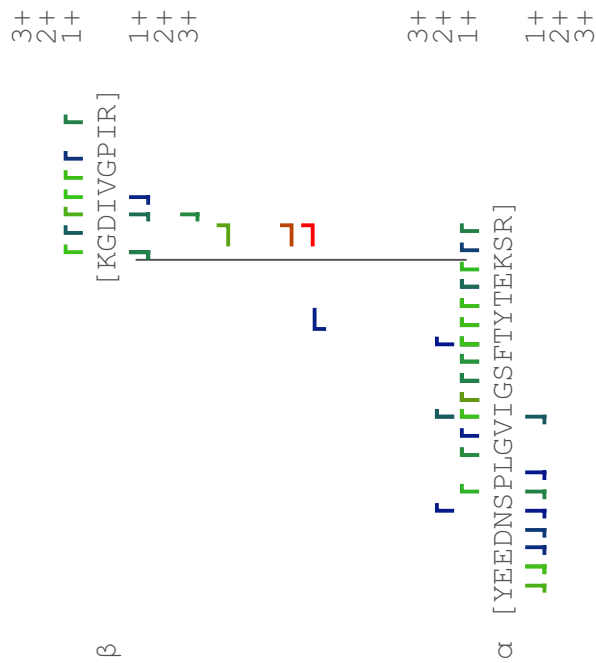
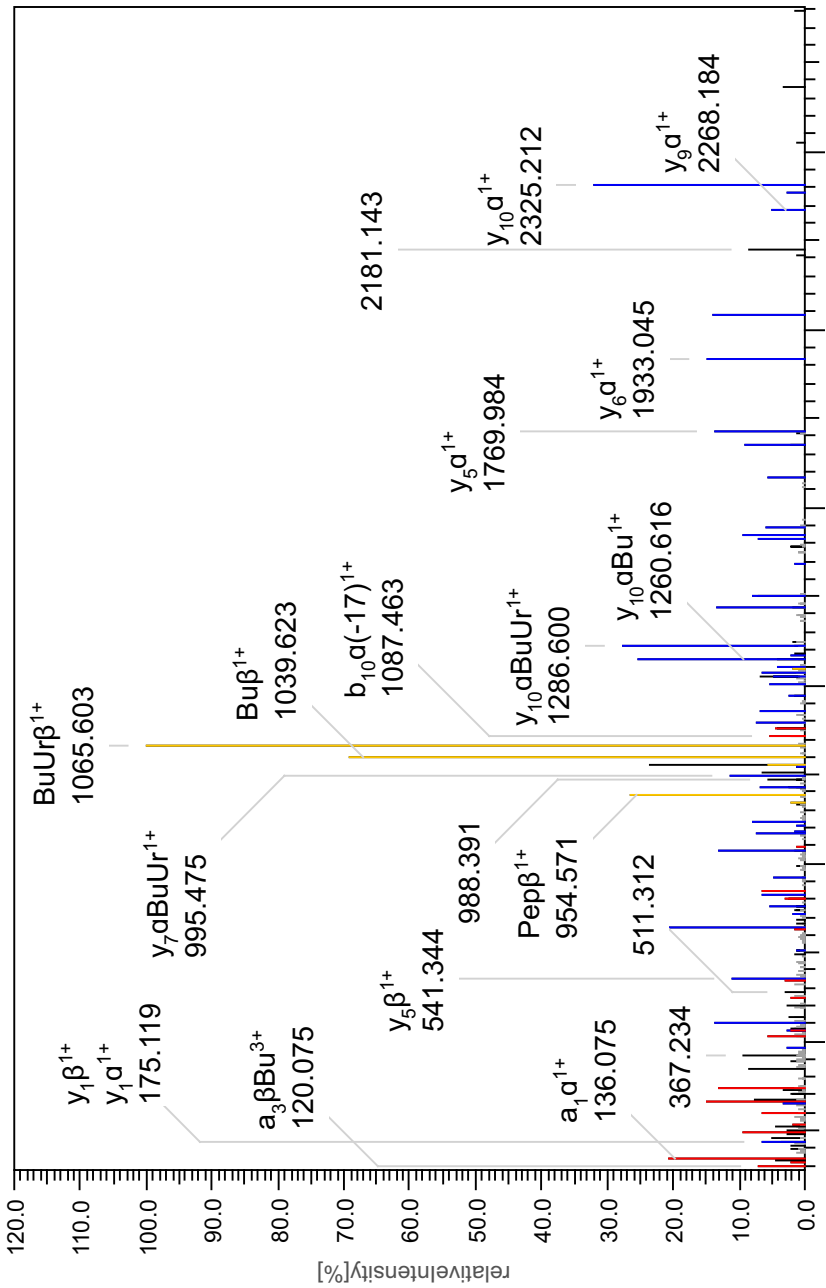
SurA K135
OmpX K82

theor.Mass(M+H+): 3696.796
 PrecursorMass(M+H+): 3696.787
 Deviation: -2.37 ppm
 m/z: 924.95233
 Charge: +4



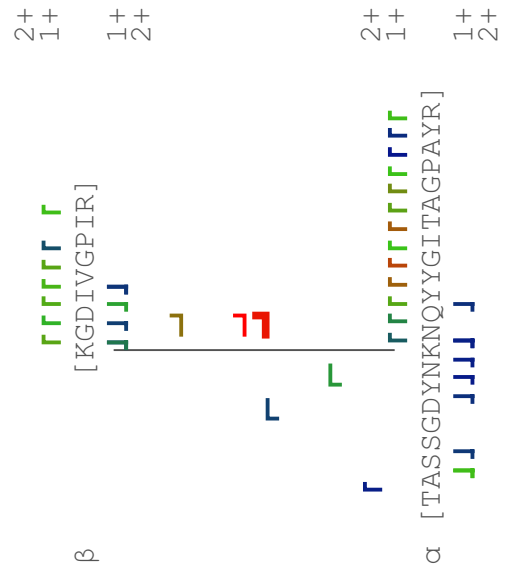
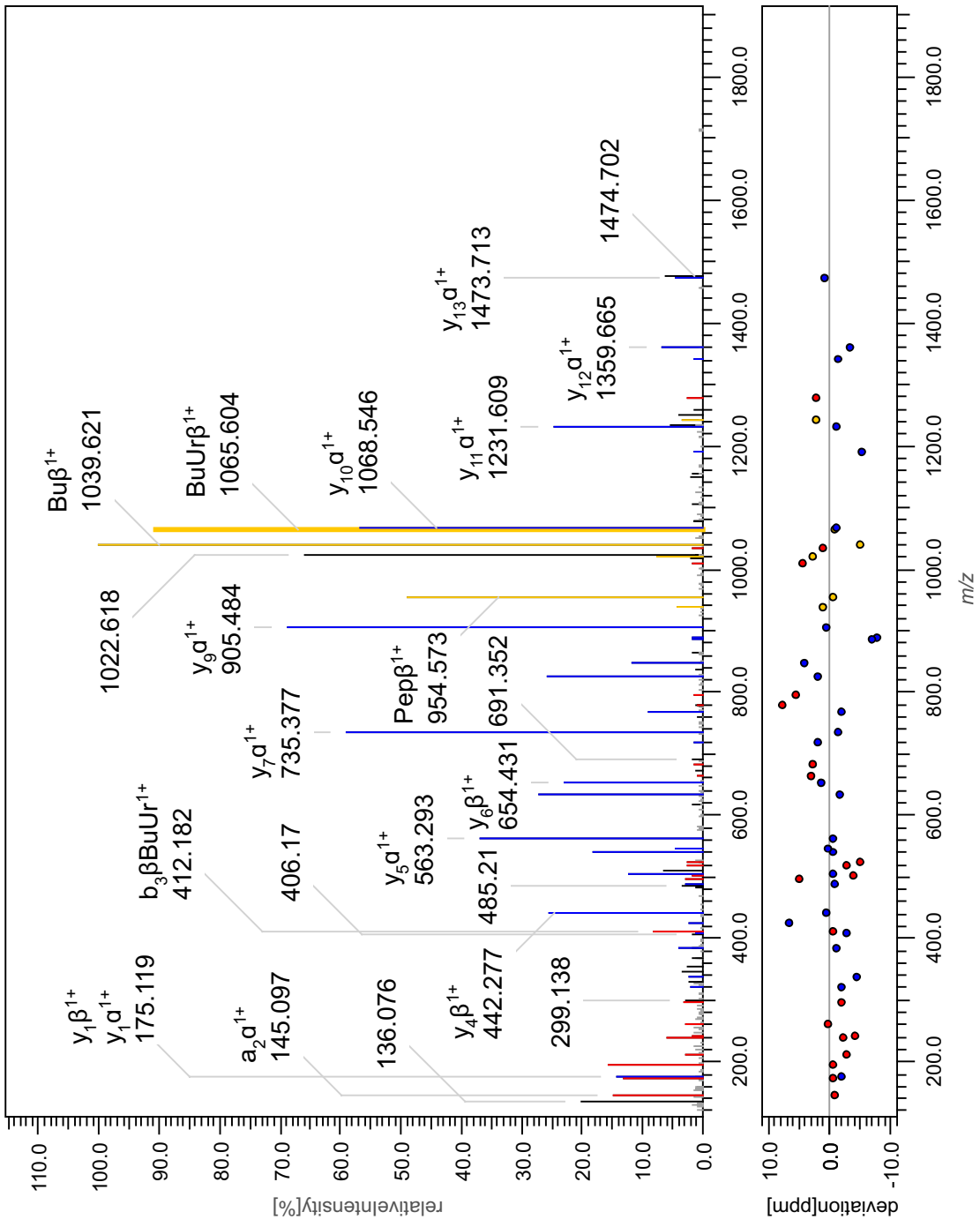
SurA K253
OmpX K71

theor.Mass(M+H+):3541.781
PrecursorMass(M+H+):3541.769
Deviation-3.26ppm
m/z:886.1978
Charge:+4



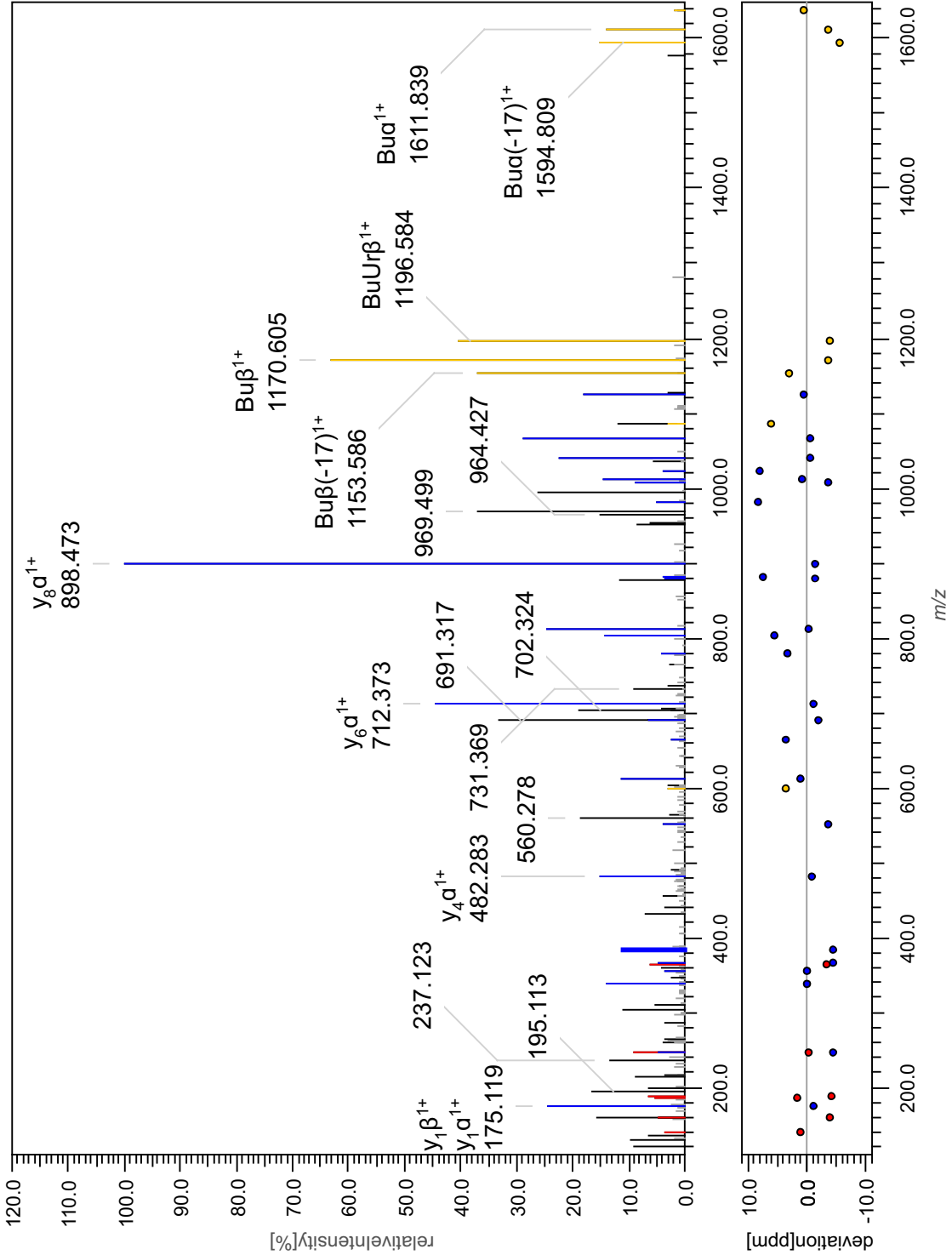
SurA K253
OmpX K82

theor.Mass(M+H+):3546.761
PrecursorMass(M+H+):3546.76
Deviation-0.28ppm
m/z:887.4455
Charge:+4



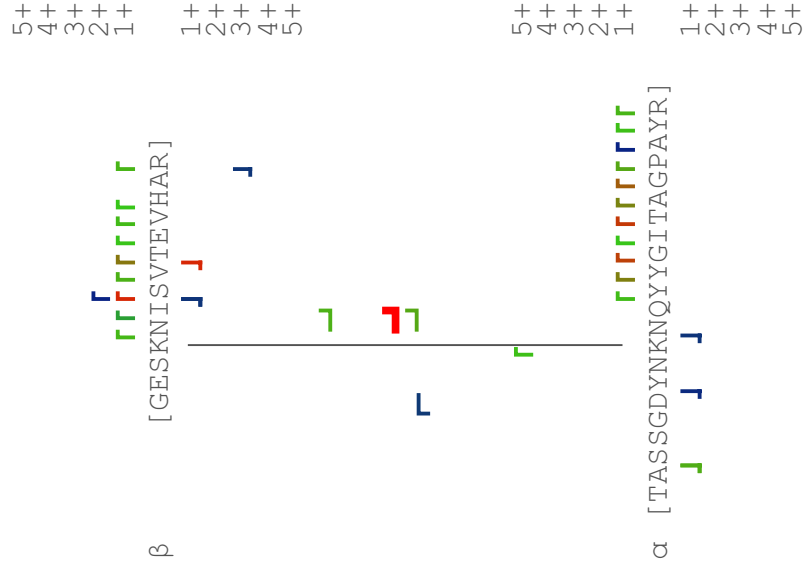
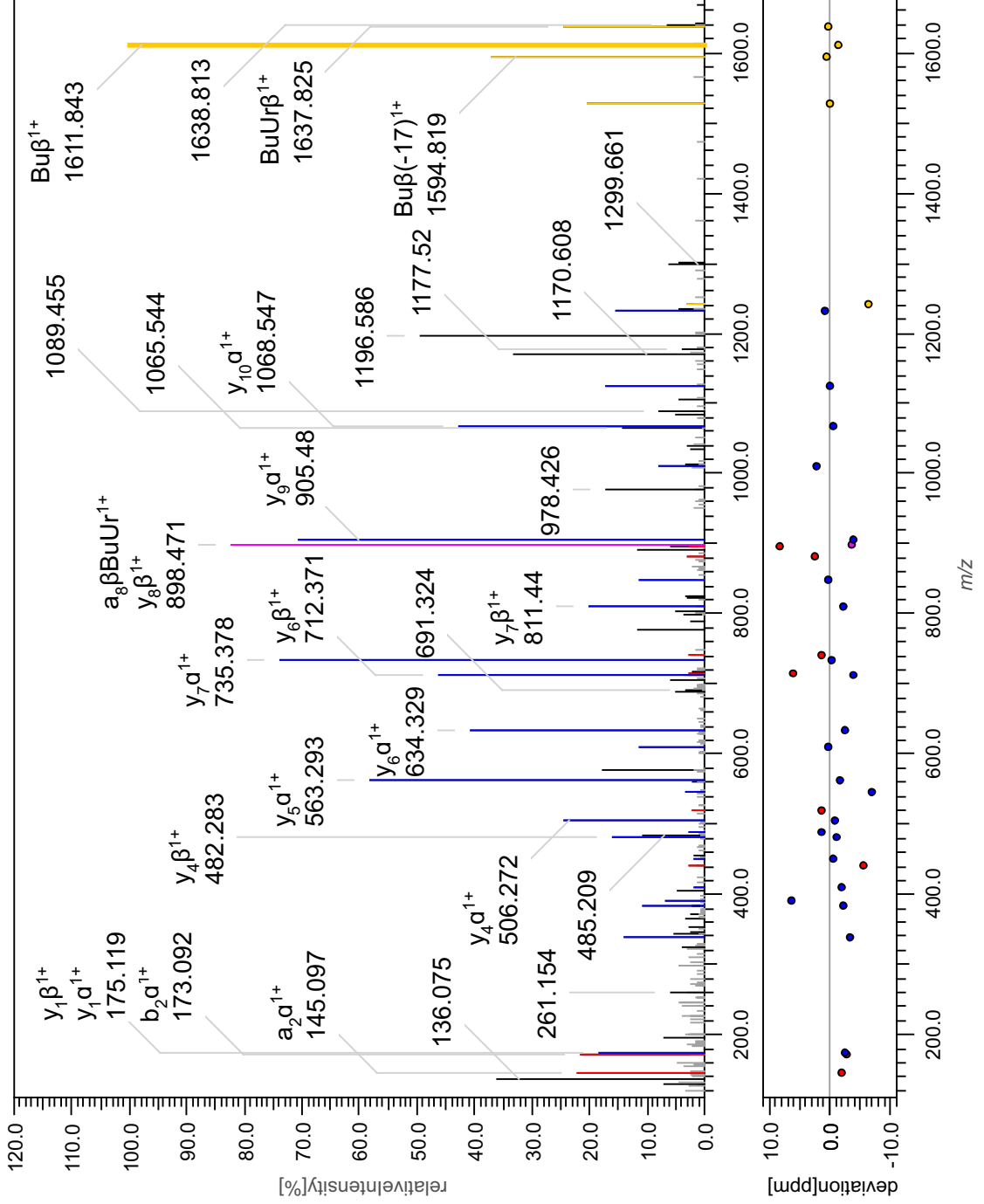
SurA K279
OmpX K50

theor.Mass(M+H+):2807.426
PrecursorMass(M+H+):2807.42
Deviation:-1.98ppm
m/z:702.6105
Charge:+4



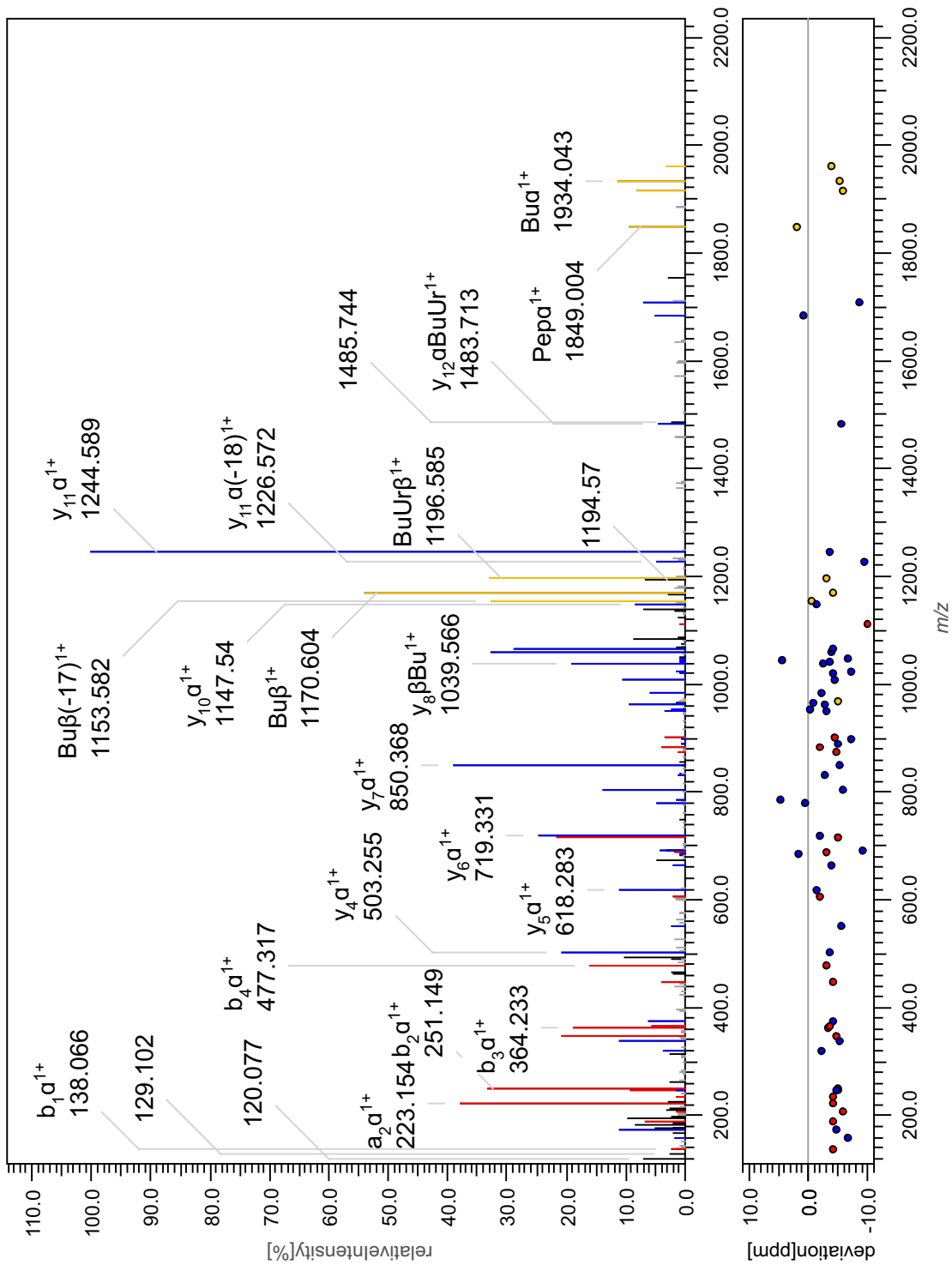
SurA K279 OmpX K82

theor.Mass(M+H⁺): 4118.979
 PrecursorMass(M+H⁺): 4118.957
 Deviation: -5.49ppm
 m/z: 824.59735
 Charge: +5



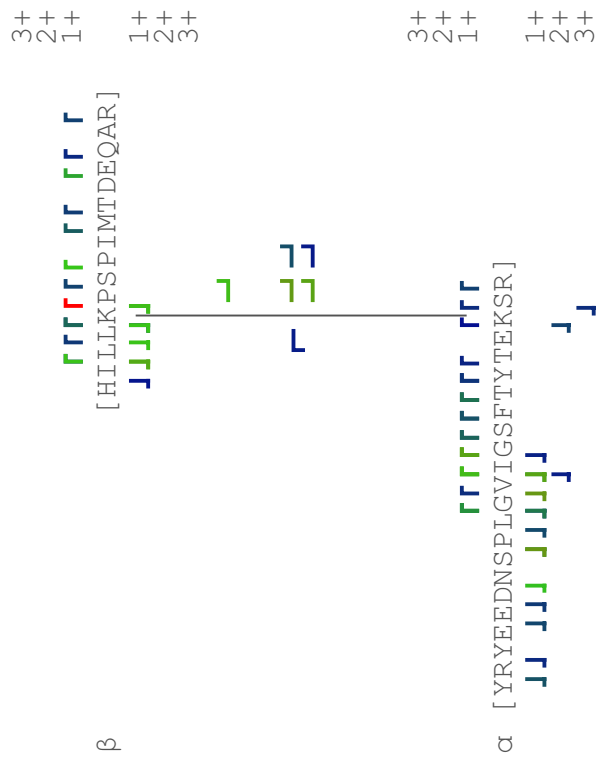
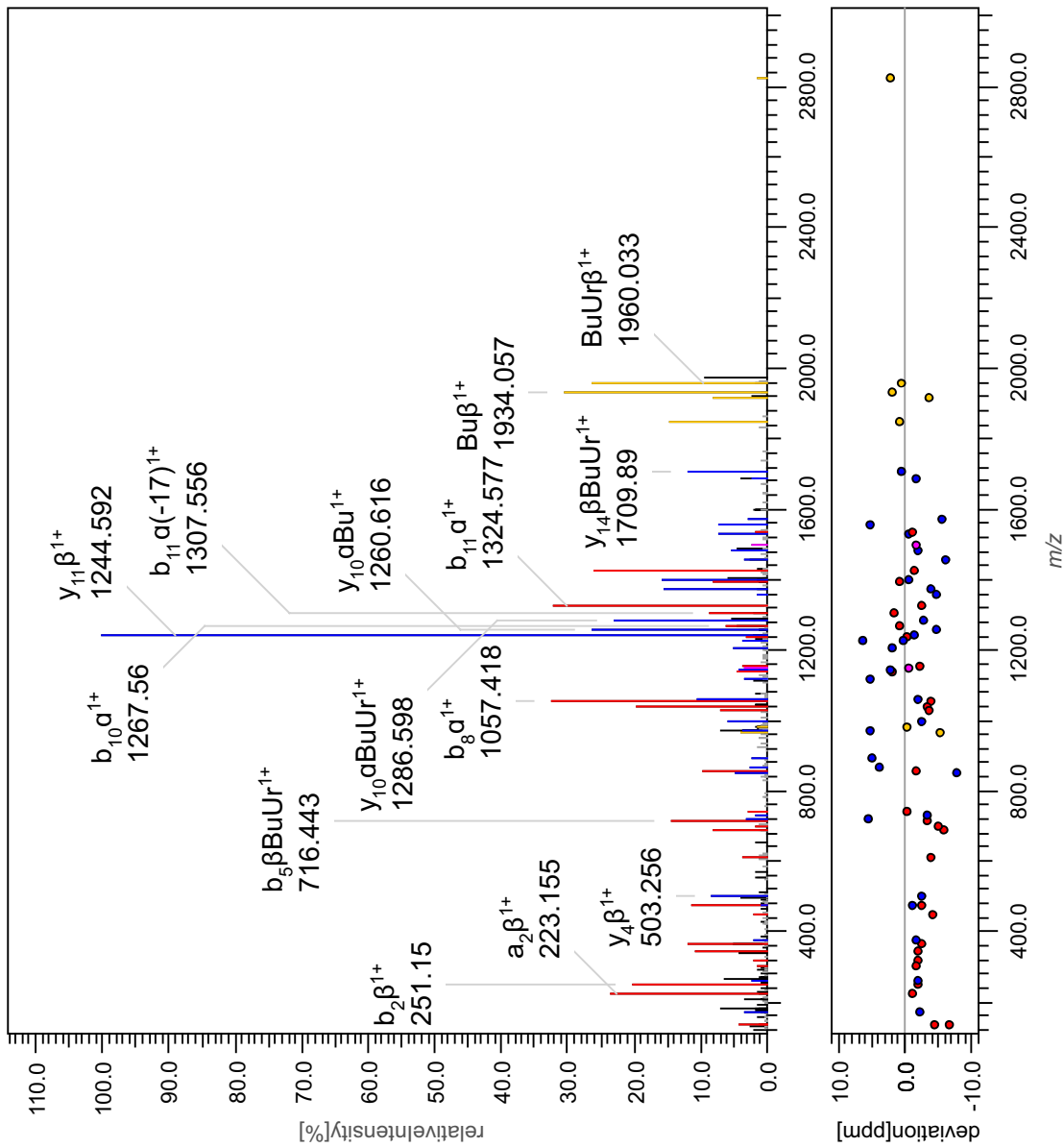
SurA K294
OmpX K50

theor.Mass(M+H+):3129.634
PrecursorMass(M+H+):3129.618
Deviation-4.93ppm
m/z:783.16
Charge:+4



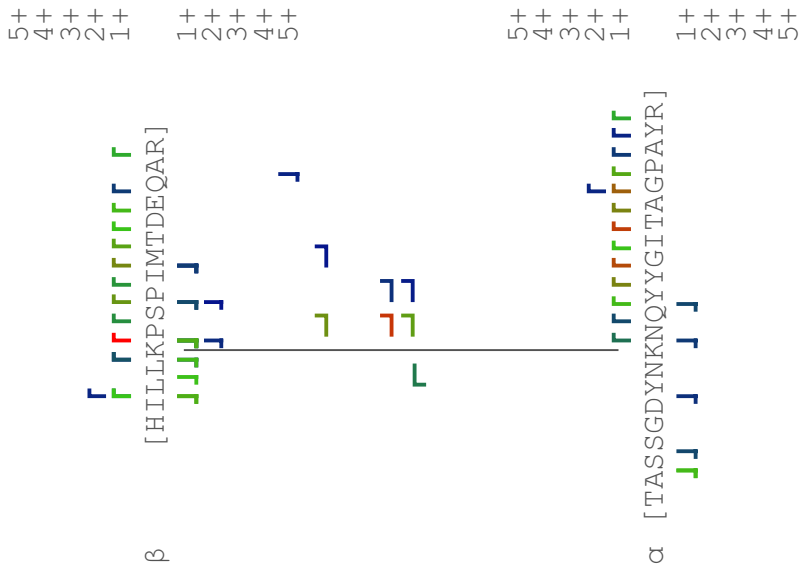
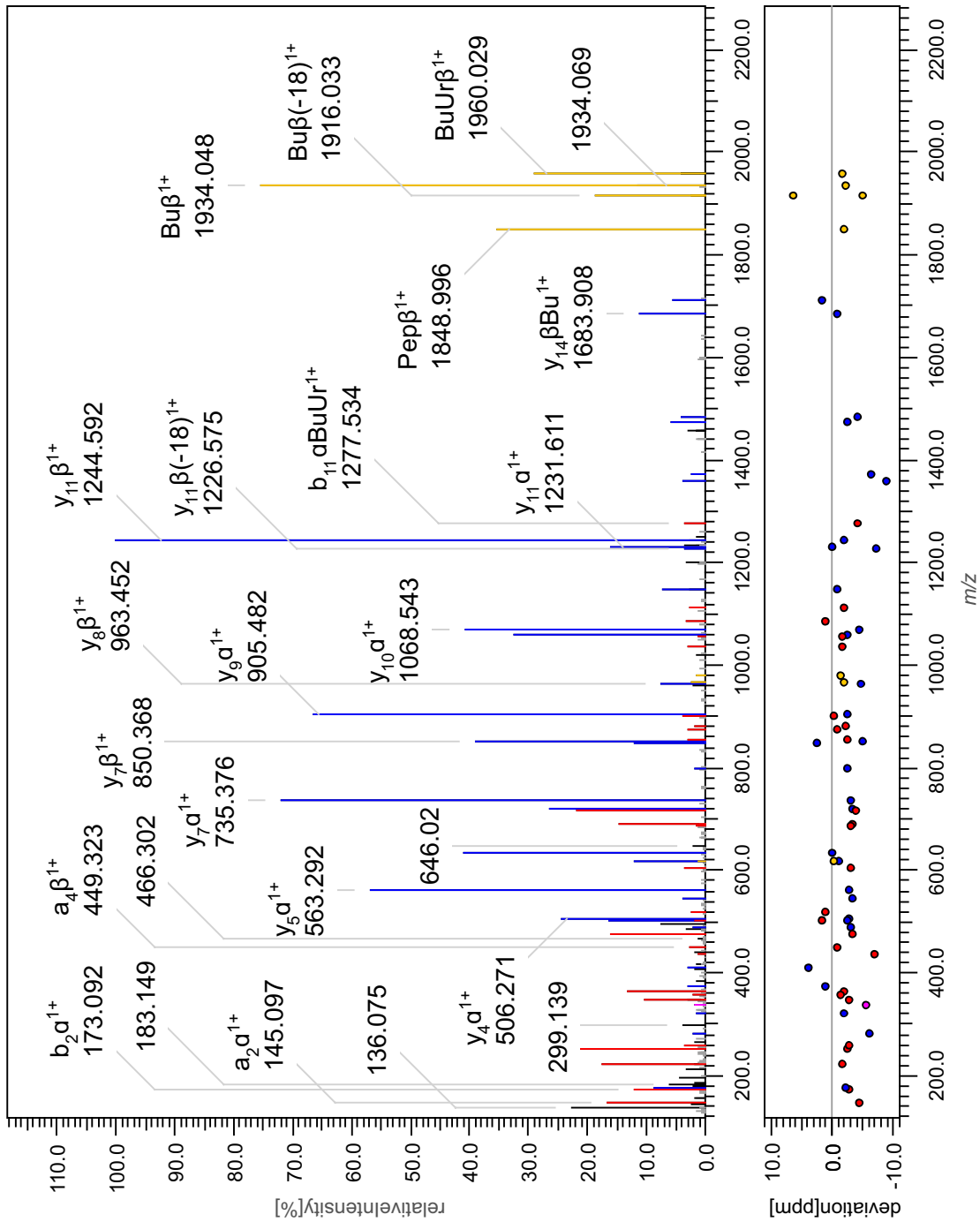
SurA K294
OmpX K71

theor.Mass(M+H+):4755.372
PrecursorMass(M+H+):4755.365
Deviation:-1.45ppm
m/z:951.8789
Charge:+5



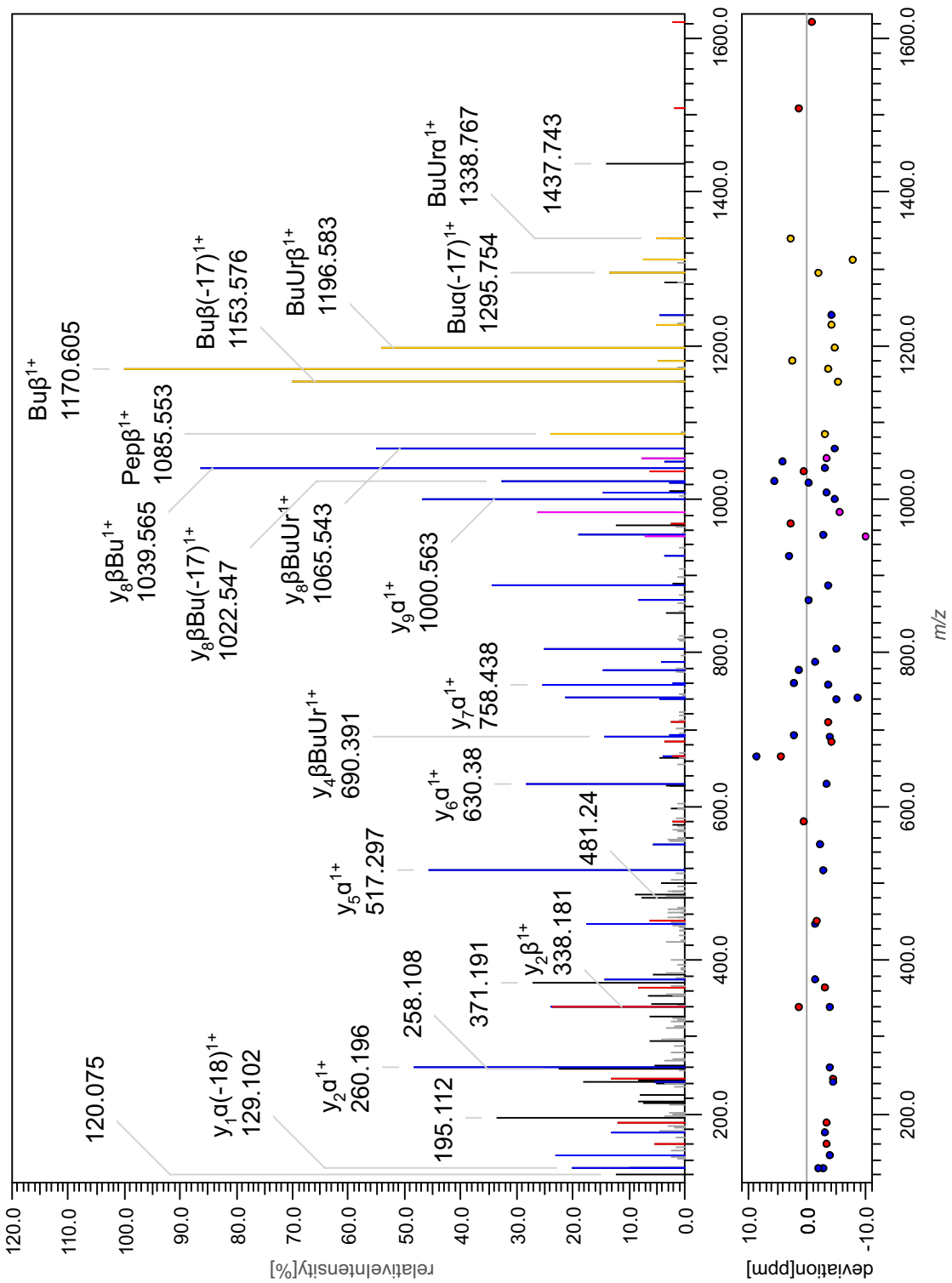
SurA K294
OmpX K82

theor.Mass(M+H+):4441.188
PrecursorMass(M+H+):4441.17
Deviation-4.09ppm
m/z:889.0398
Charge:+5



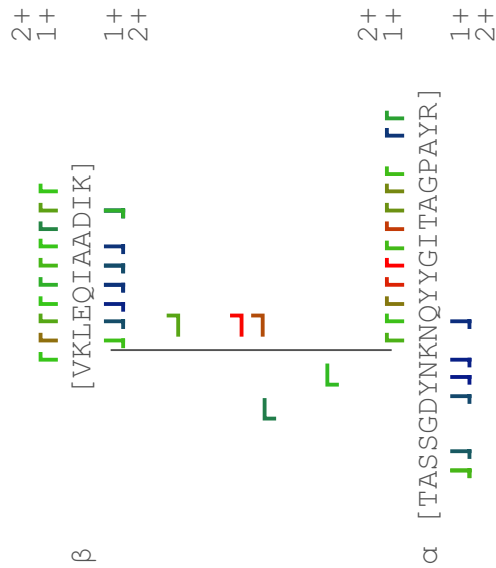
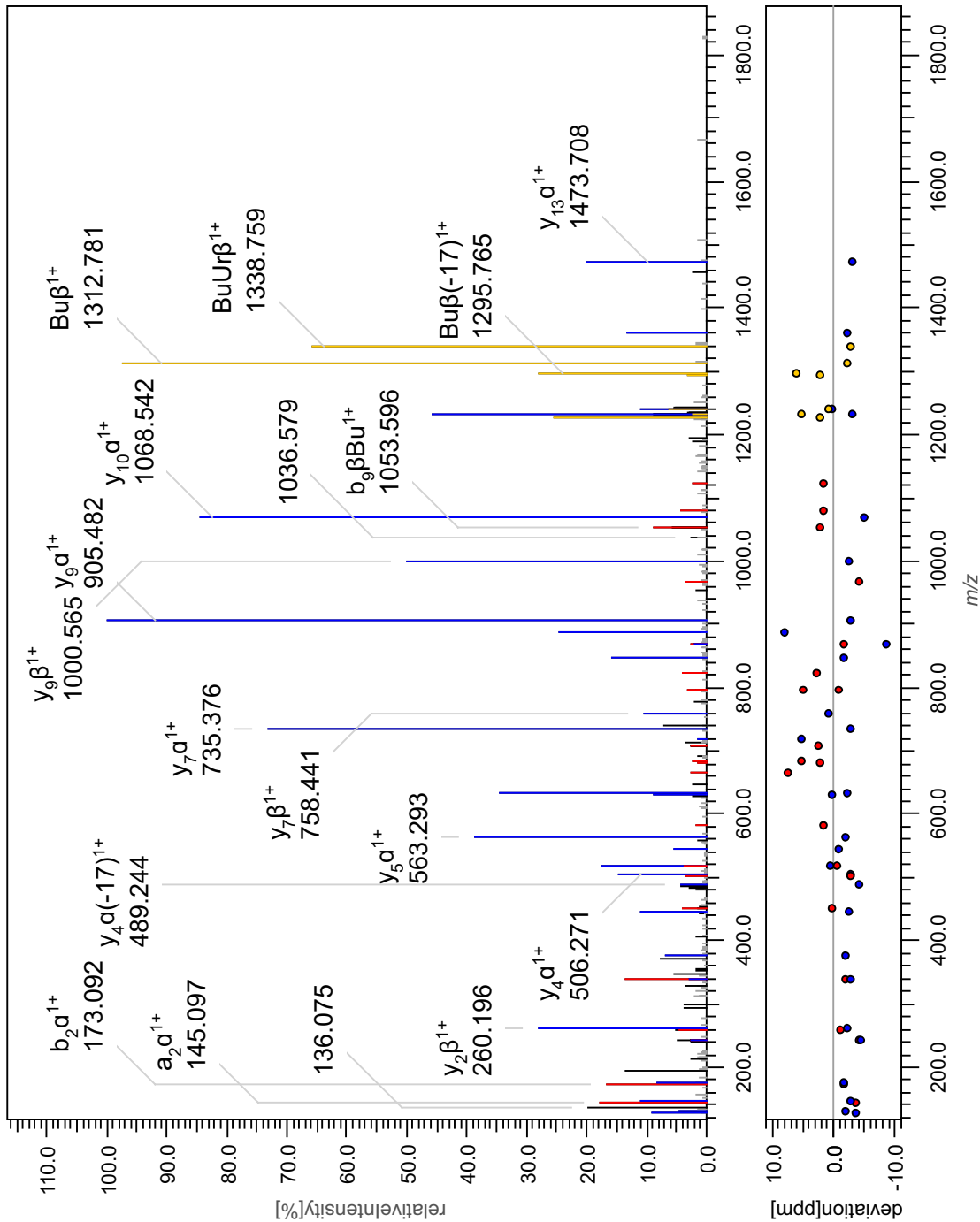
SurA K307
OmpX K50

theor.Mass(M+H+):2508.364
PrecursorMass(M+H+):2508.352
Deviation-4.93ppm
m/z:627.84344
Charge:+4



SurA K307
OmpX K82

theor.Mass(M+H+):3819.919
PrecursorMass(M+H+):3819.91
Deviation-2.25ppm
m/z:955.733
Charge:+4



SurA K316 OmpX K82

3+
2+
1+

β [LEQIAADIKSGK]

JJJJ
JJJJ
JJJJ

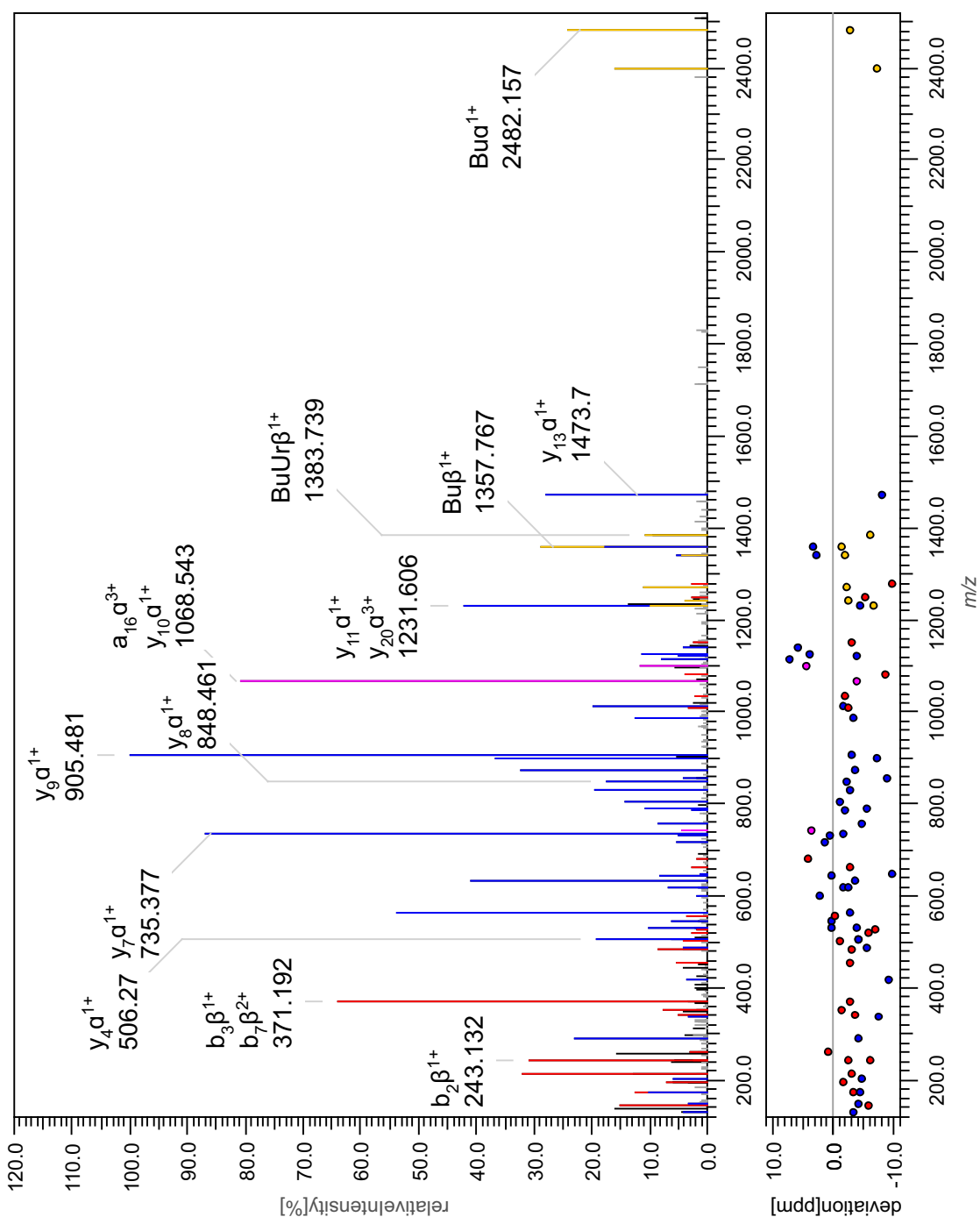
3+
2+
1+
1+
2+
3+

α [TASSGDYKNQYYGITAGPAYR]

JJJJJJJJJJJ
JJJJJJJJJJ
JJJJJJJJJJ

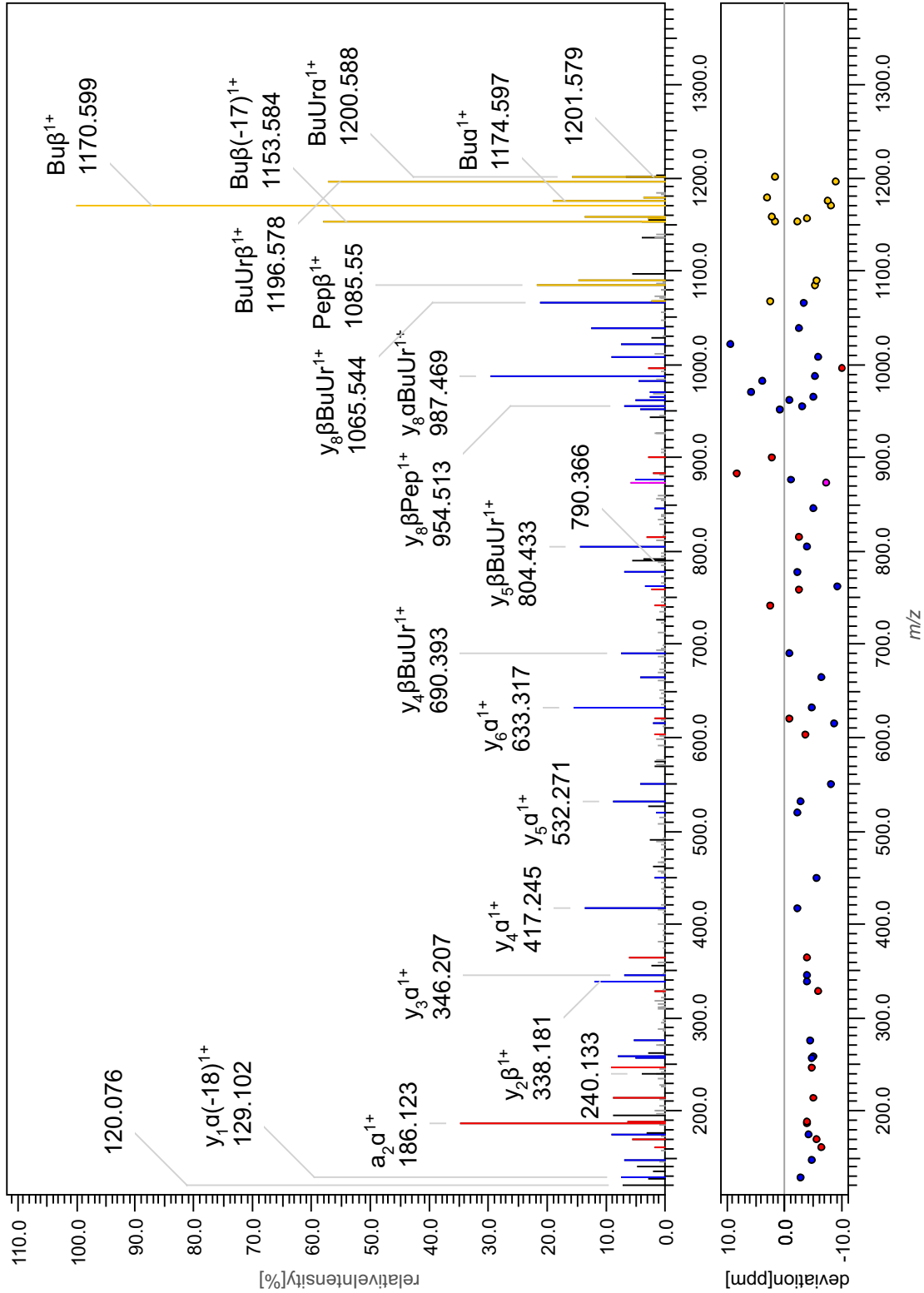


theor.Mass(M+H+): 3864.904
PrecursorMass(M+H+): 3864.89
Deviation: -3.71 ppm
m/z: 966.97784
Charge: +4



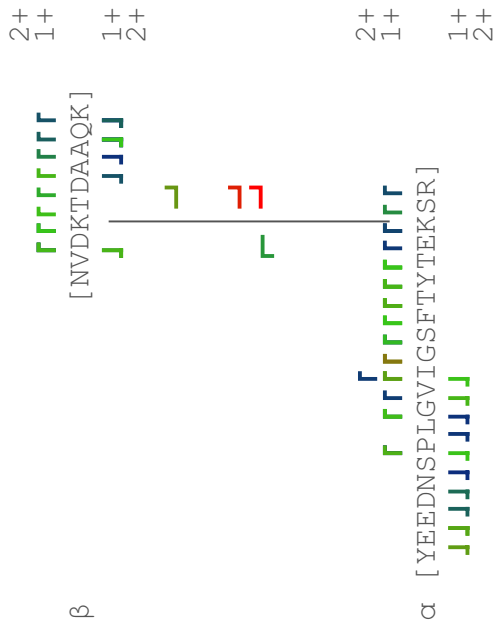
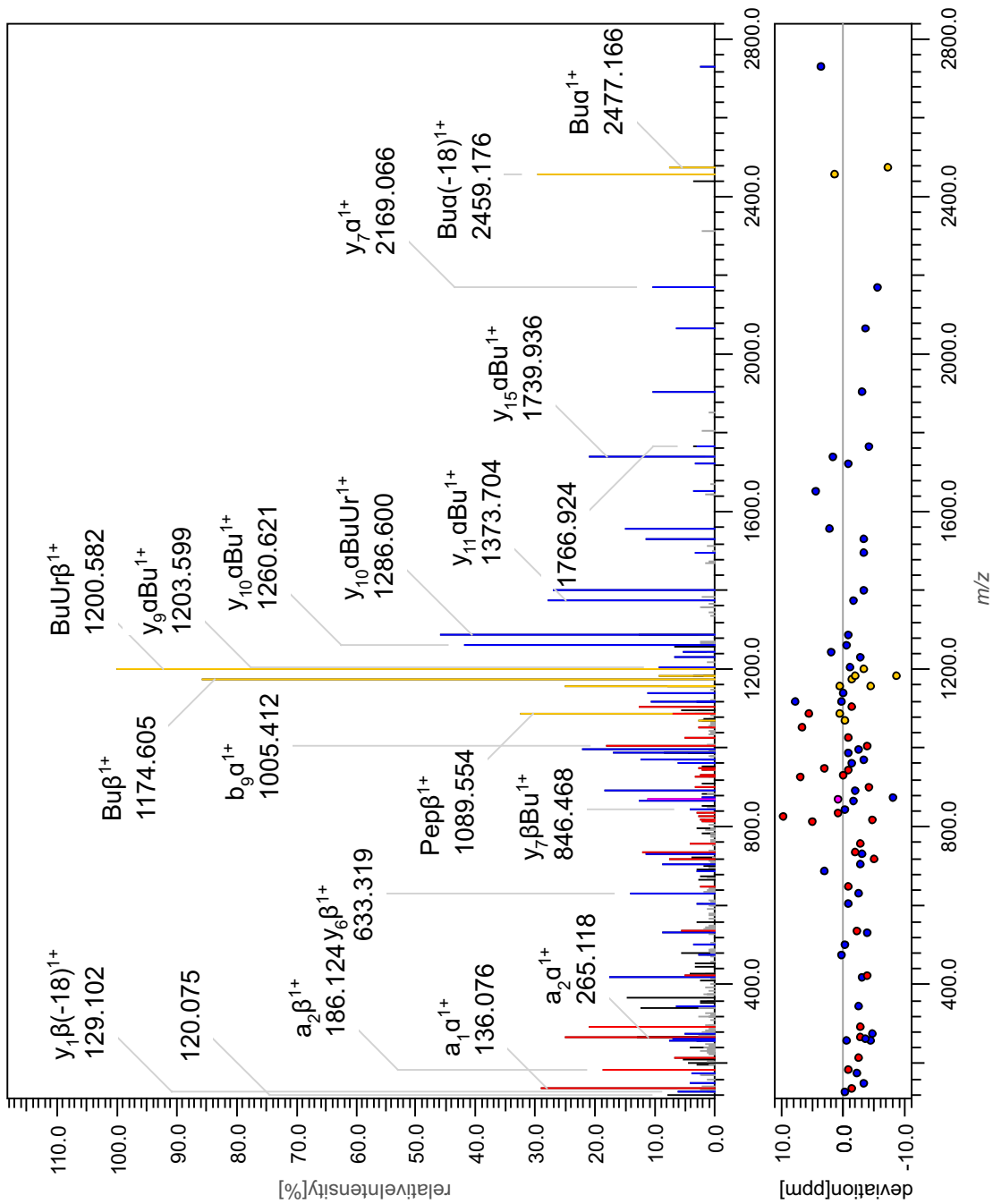
SurA K389
OmpX K50

theor.Mass(M+H+):2370.187
PrecursorMass(M+H+):2370.178
Deviation:-3.76ppm
m/z:790.7309
Charge:+3



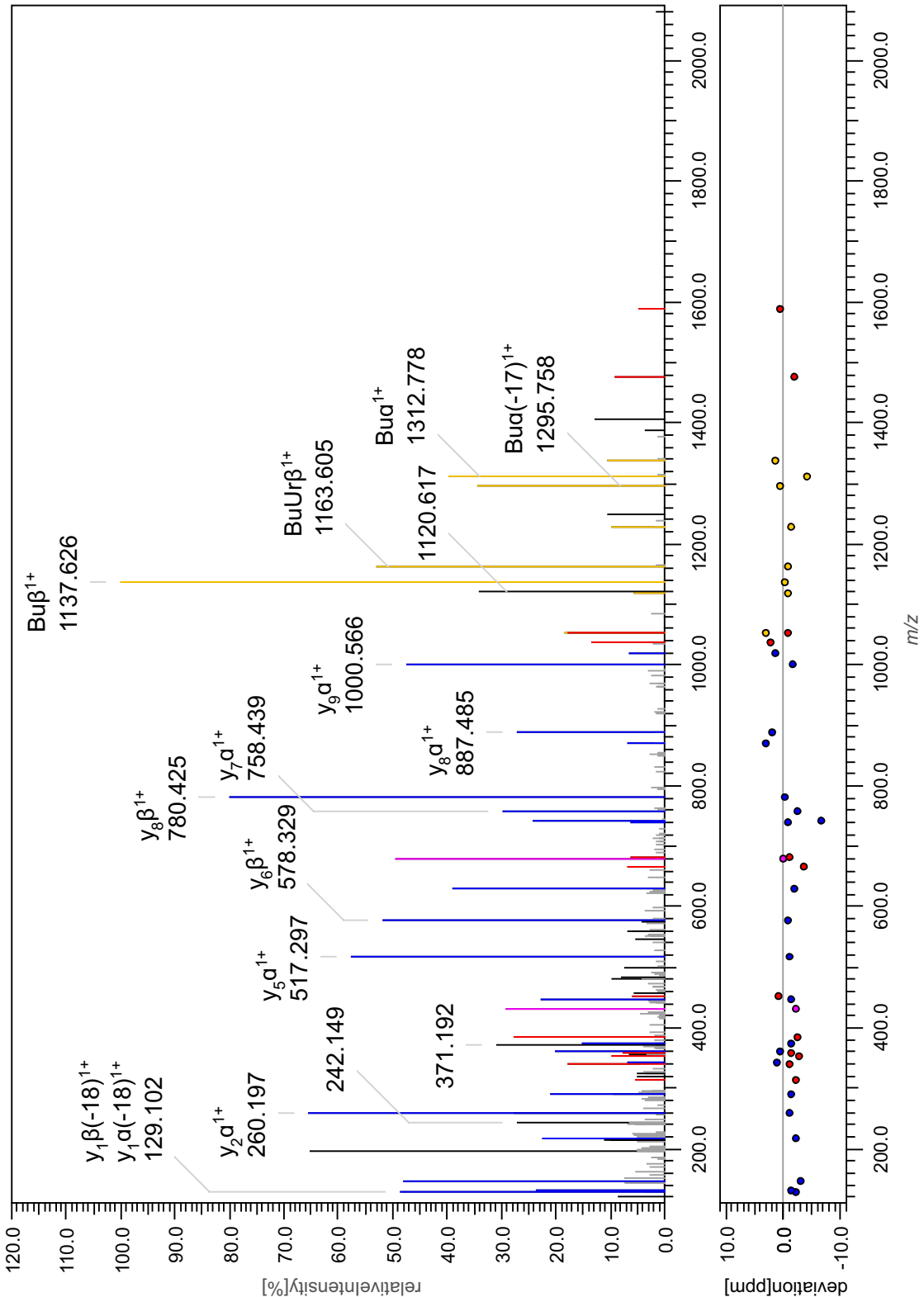
SurA K389
OmpX K71

theor.Mass(M+H+):3676.761
PrecursorMass(M+H+):3676.75
Deviation-3.14ppm
m/z:919.9429
Charge:+4



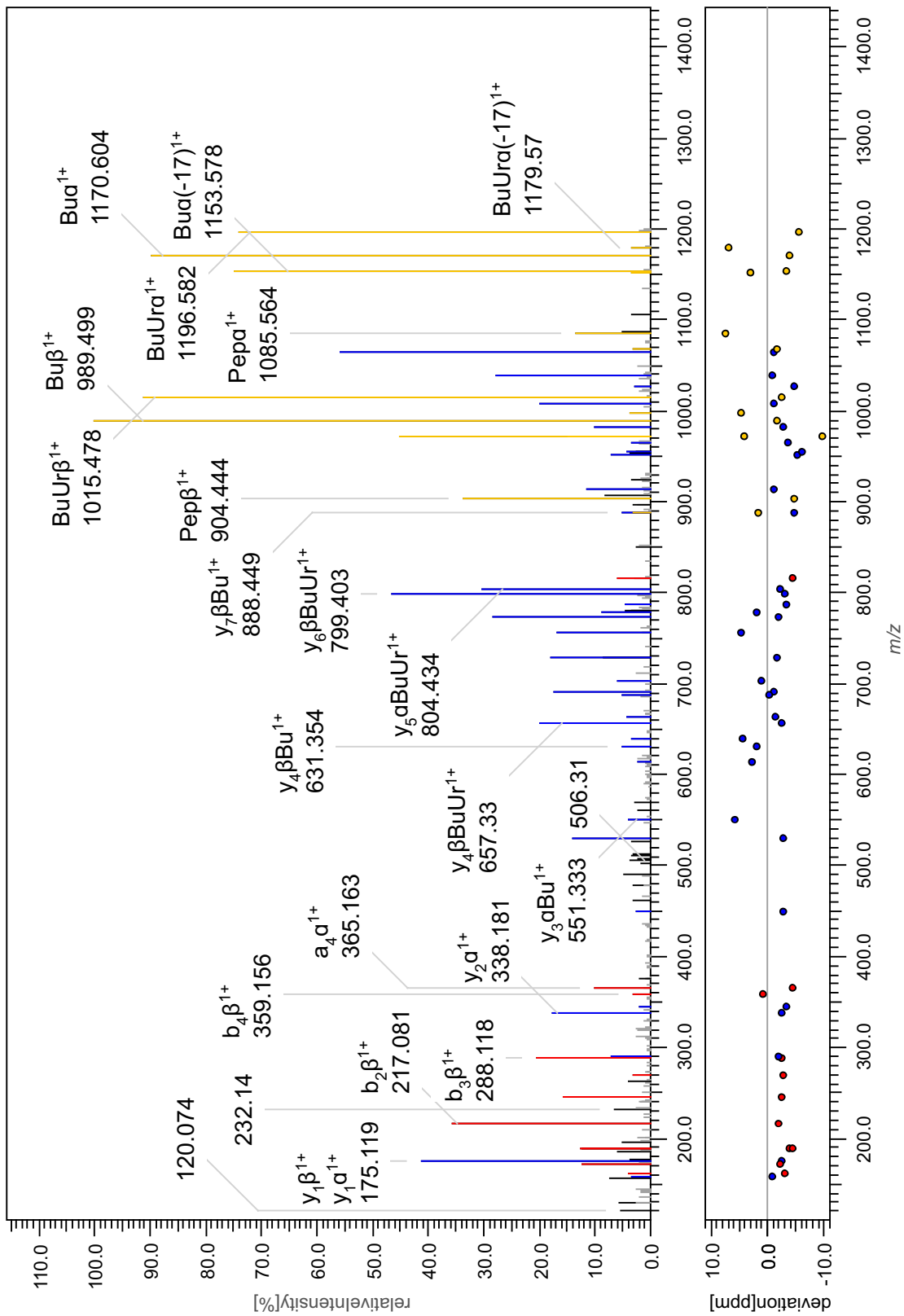
SurA K389
OmpX K82

theor.Mass(M+H+):2475.382
PrecursorMass(M+H+):2475.377
Deviation:-1.92ppm
m/z:619.5997
Charge:+4



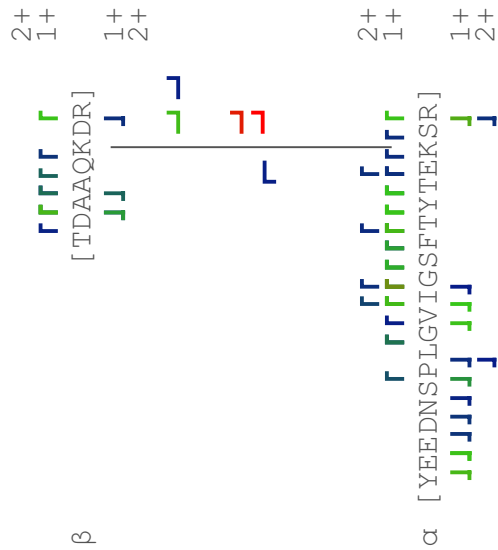
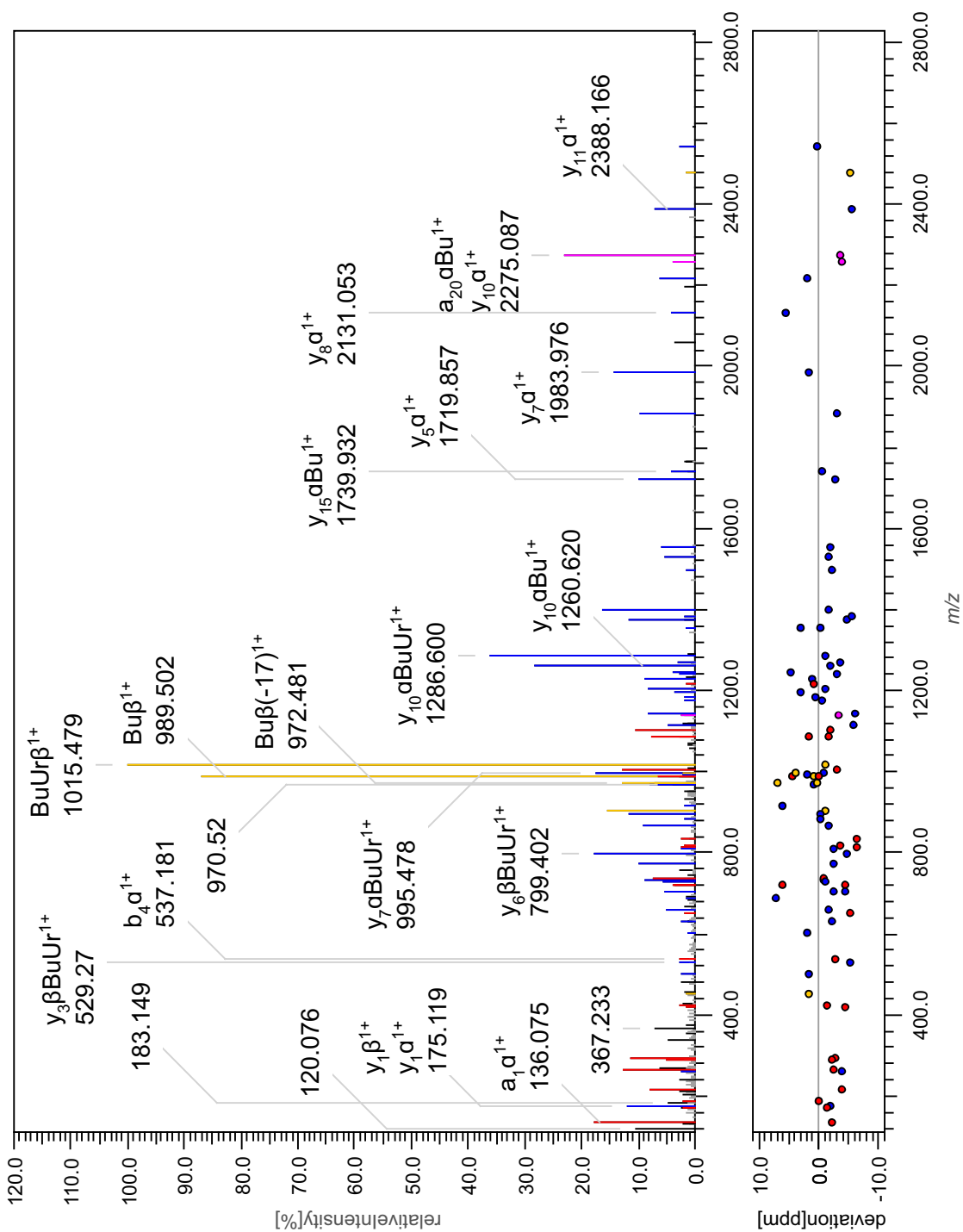
SurA K395
OmpX K50

theor.Mass(M+H+):2185.082
PrecursorMass(M+H+):2185.075
Deviation:-3.07ppm
m/z:729.0299
Charge:+3



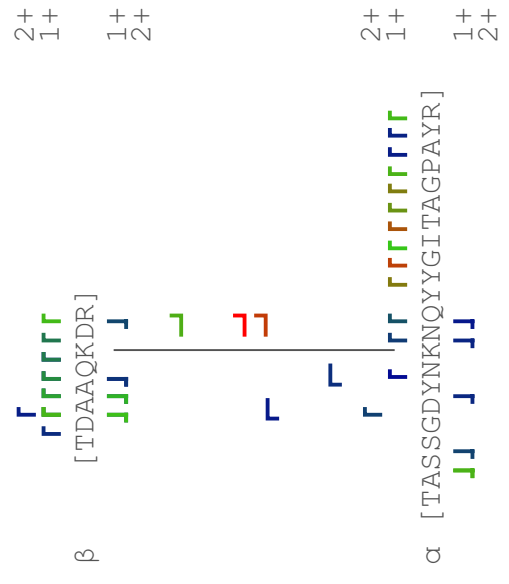
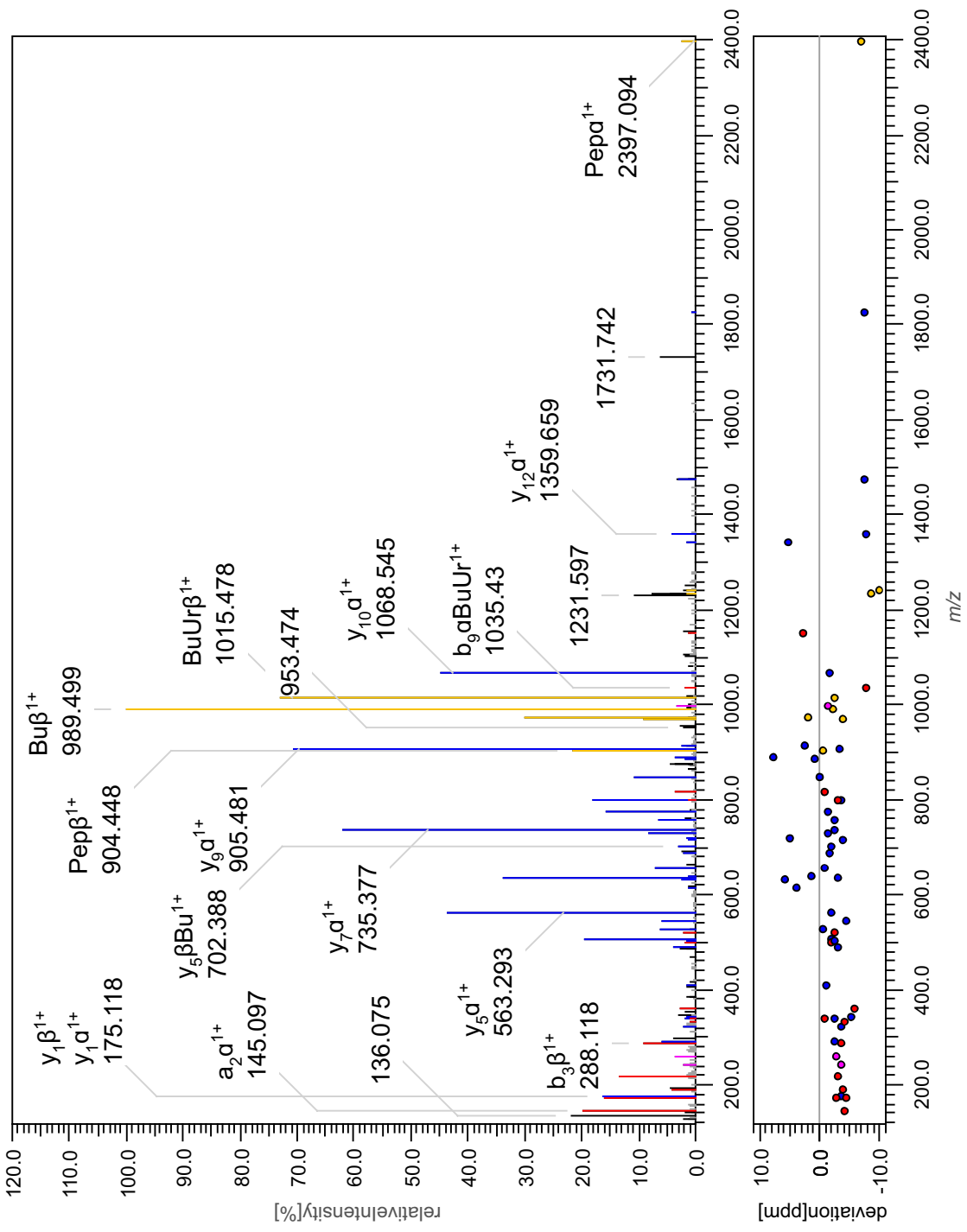
SurA K395
OmpX K71

theor.Mass(M+H+): 3491.656
PrecursorMass(M+H+): 3491.649
Deviation: -1.93ppm
m/z: 873.6678
Charge: +4



SurA K395
OmpX K82

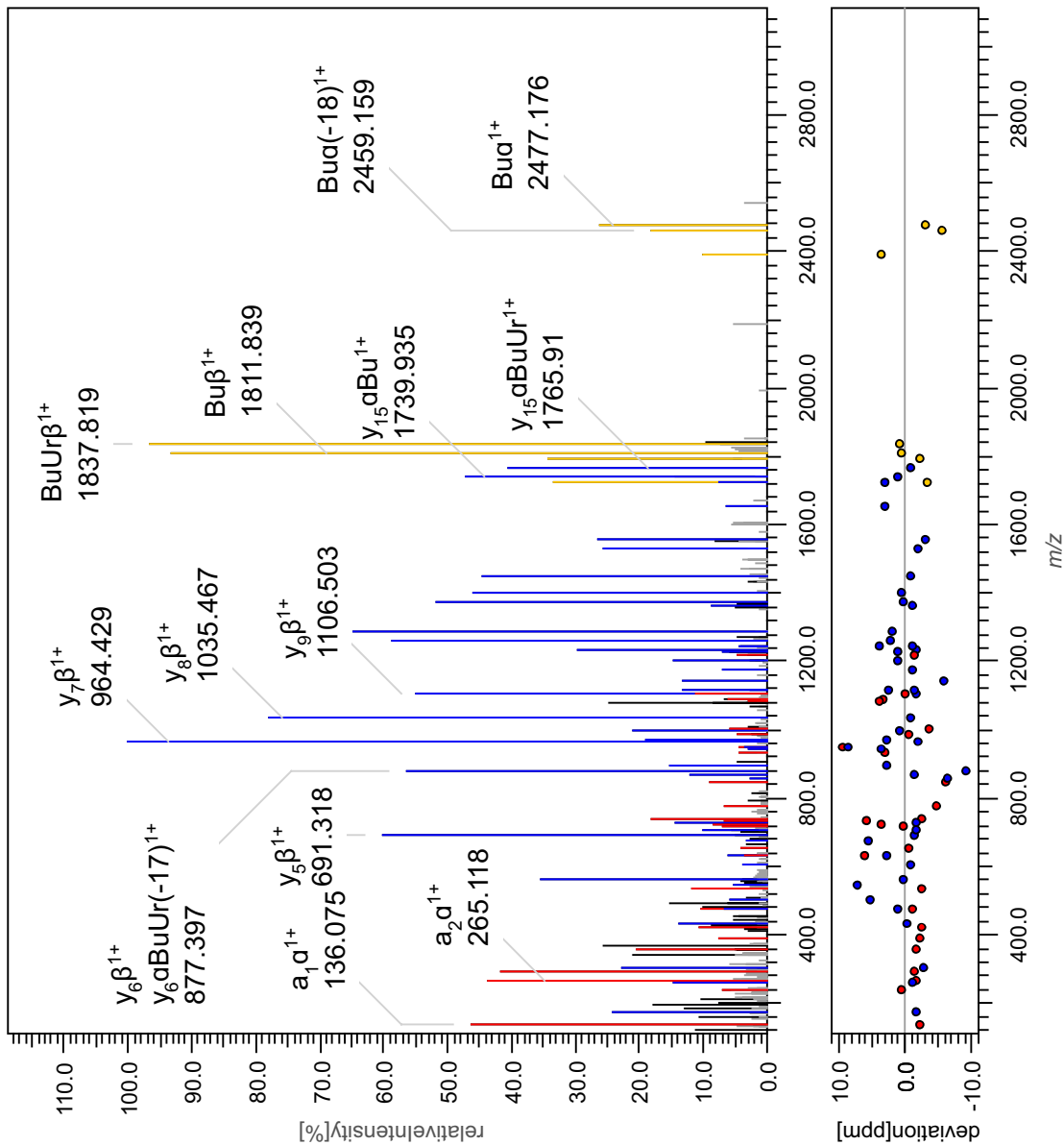
theor.Mass(M+H+): 3496.636
 PrecursorMass(M+H+): 3496.618
 Deviation: -5.17 ppm
 m/z: 874.91003
 Charge: +4



rel.intensity
0% 100%

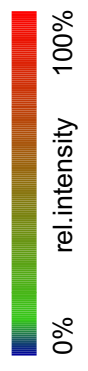
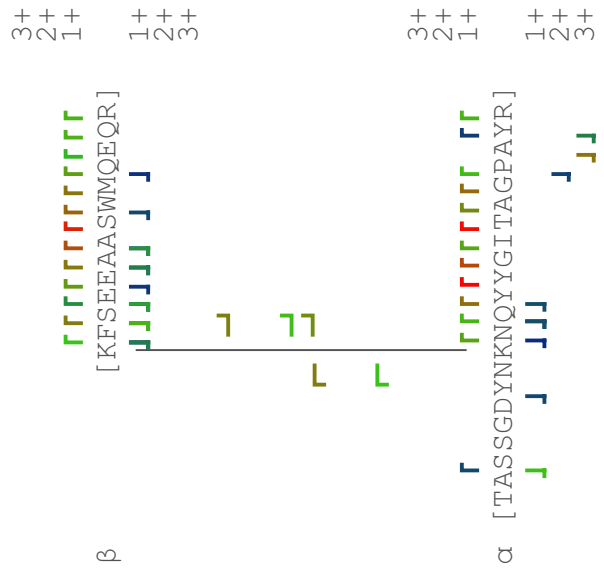
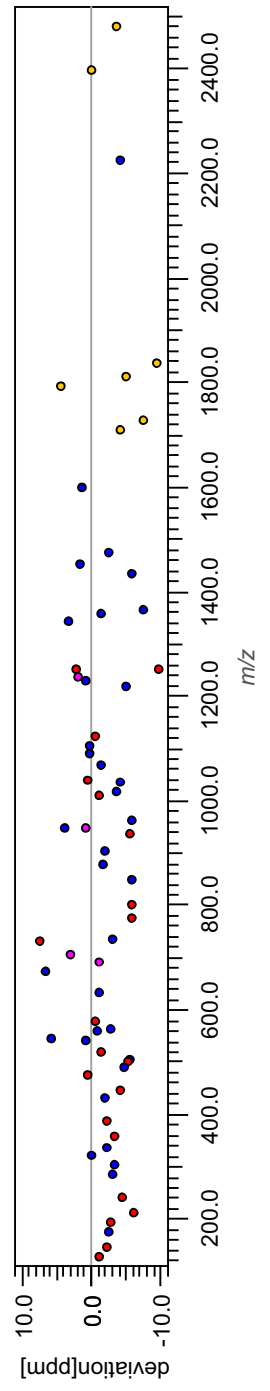
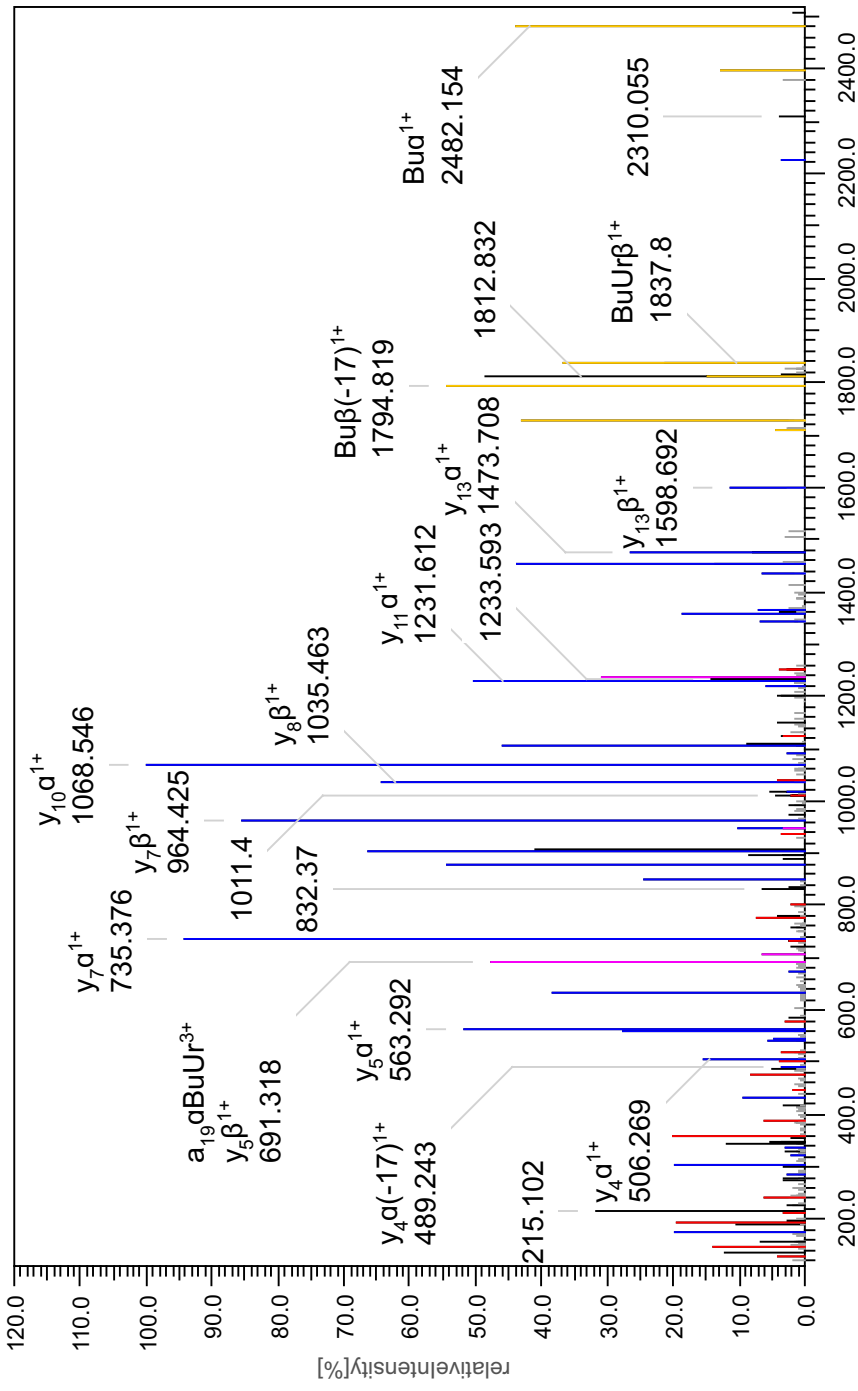
SurA K406
OmpX K71

theor.Mass(M+H+):4313.993
PrecursorMass(M+H+):4313.985
Deviation:-1.99ppm
m/z:1079.2516
Charge:+4



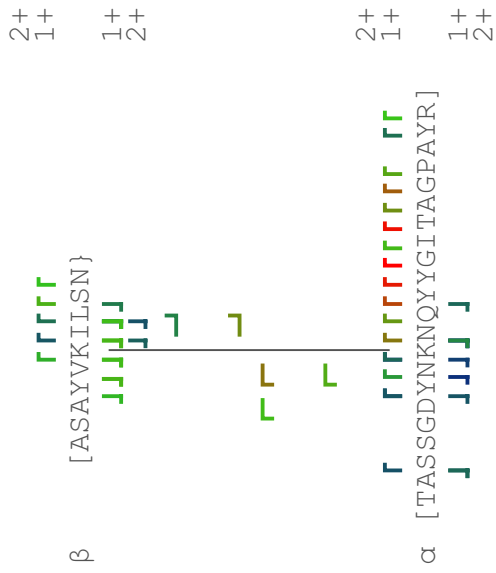
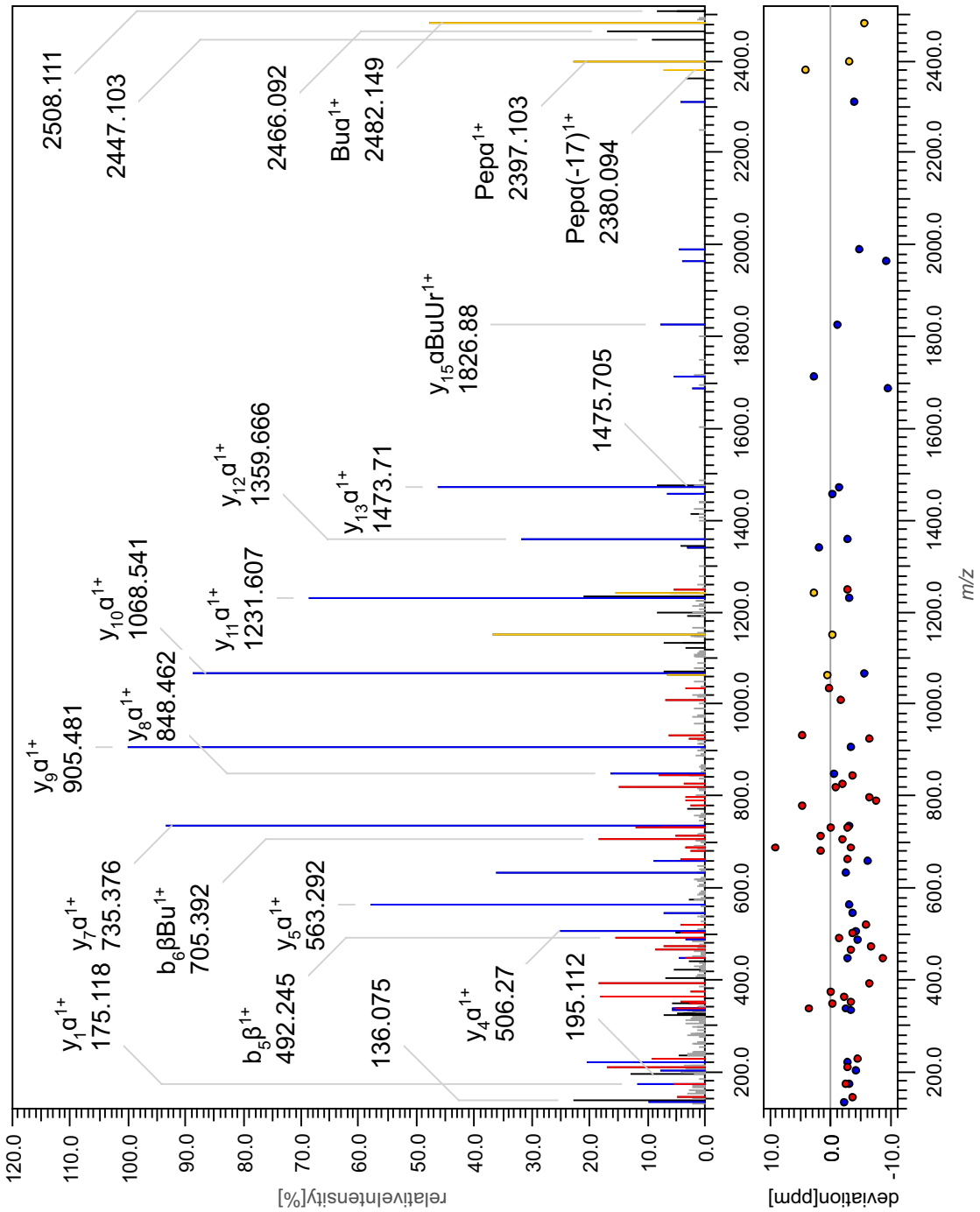
SurA K406
OmpX K82

theor.Mass(M+H+):4318.973
PrecursorMass(M+H+):4318.97
Deviation:-0.76ppm
m/z:1080.498
Charge:+4



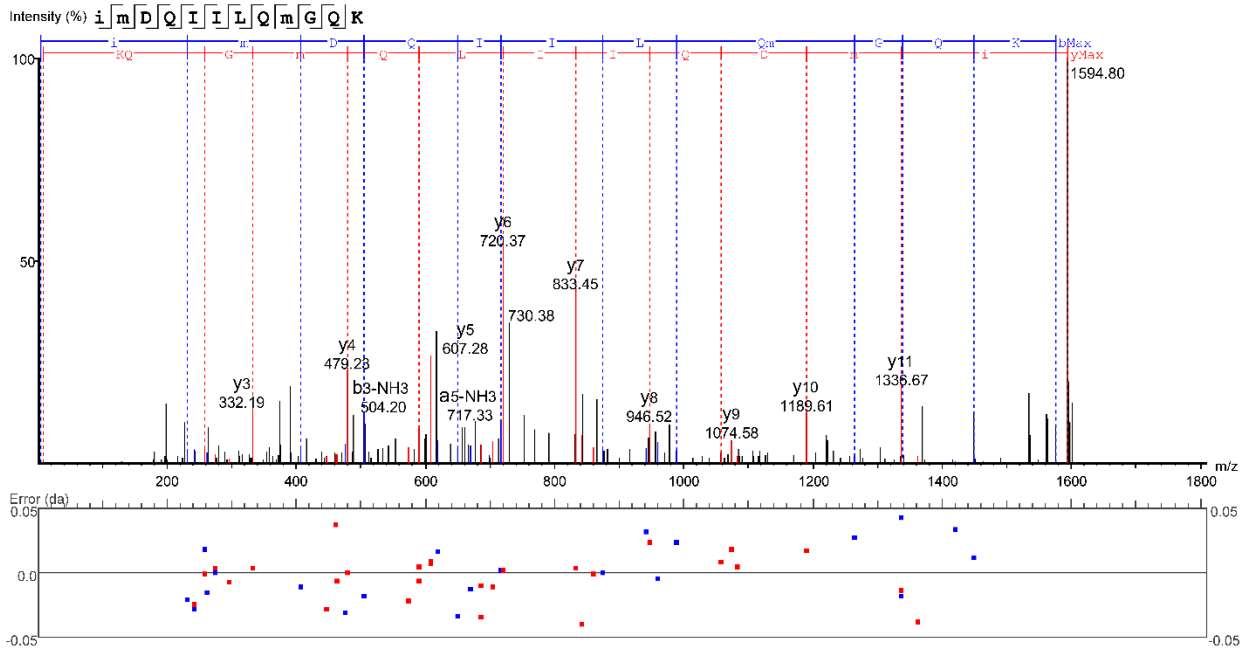
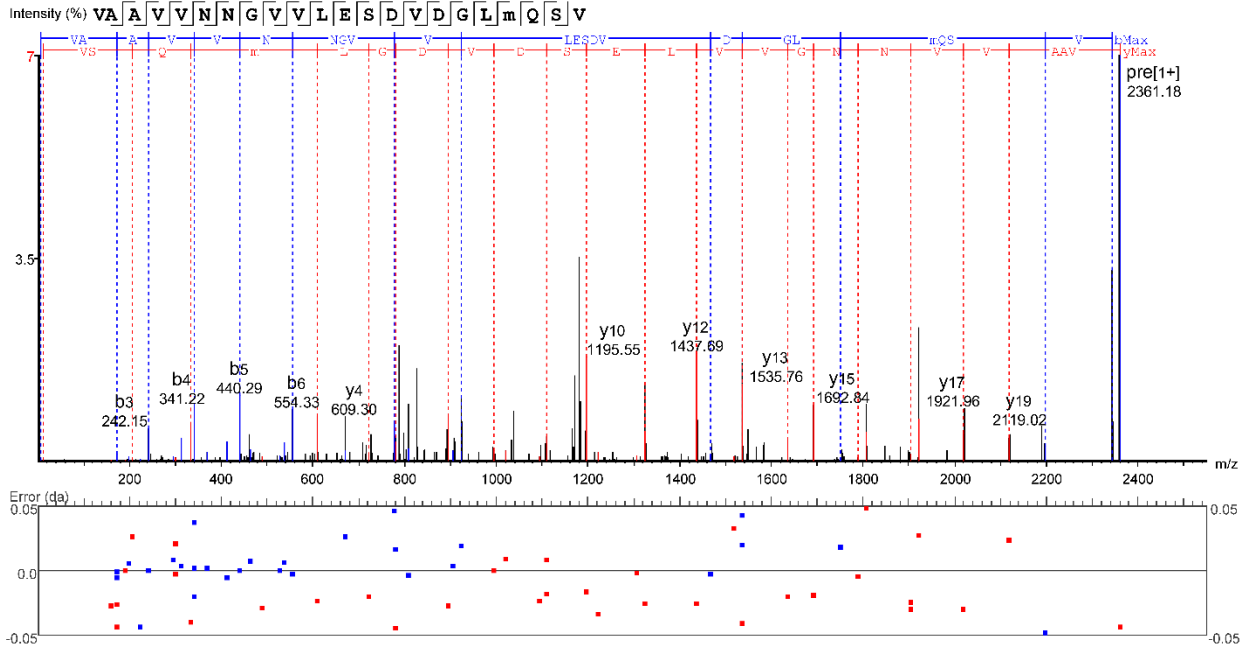
SurA K425
OmpX K82

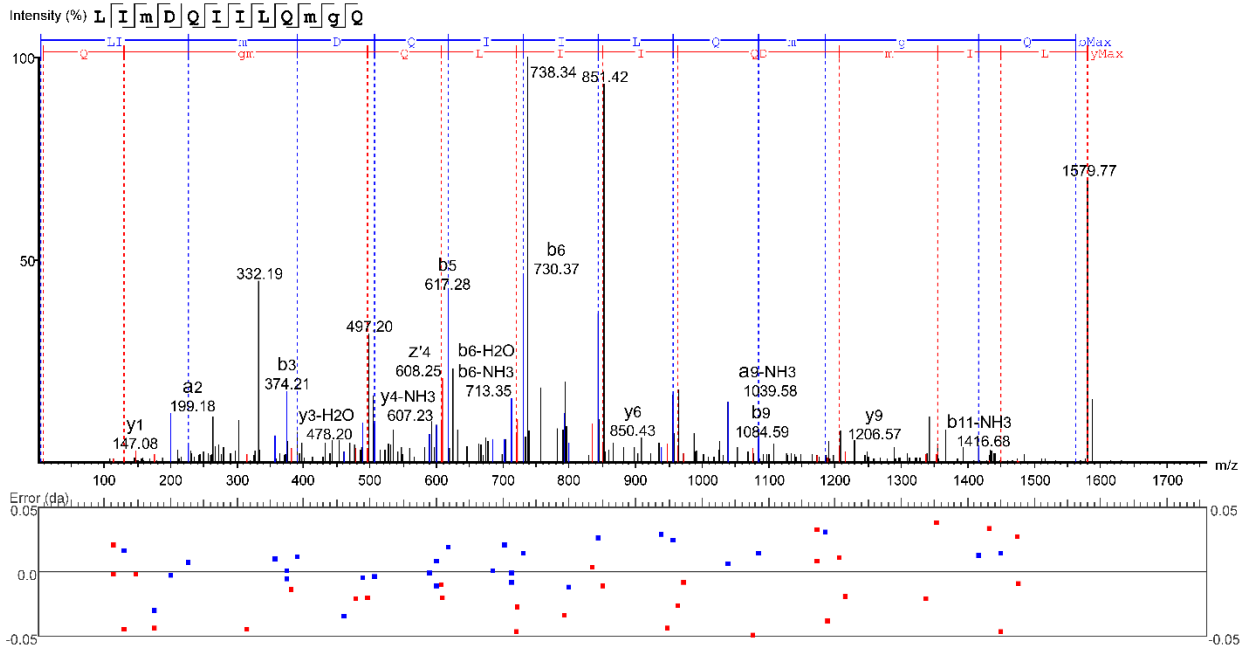
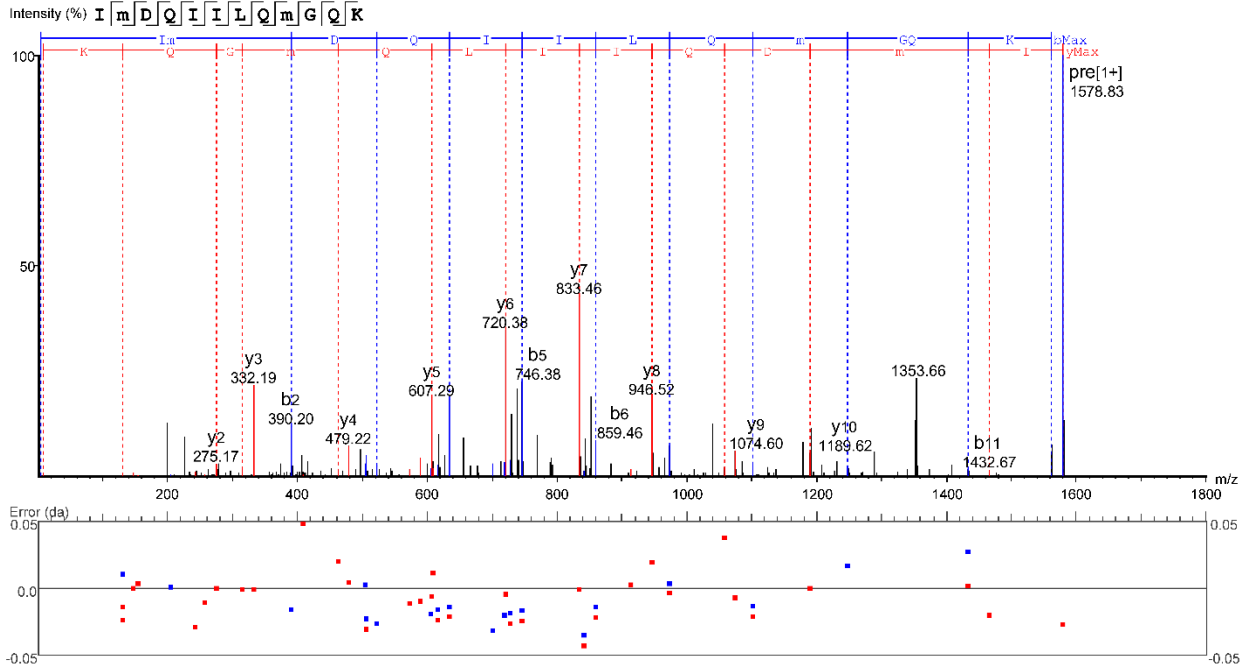
theor.Mass(M+H+):3657.782
PrecursorMass(M+H+):3657.768
Deviation:-3.84ppm
m/z:1219.9275
Charge:+3



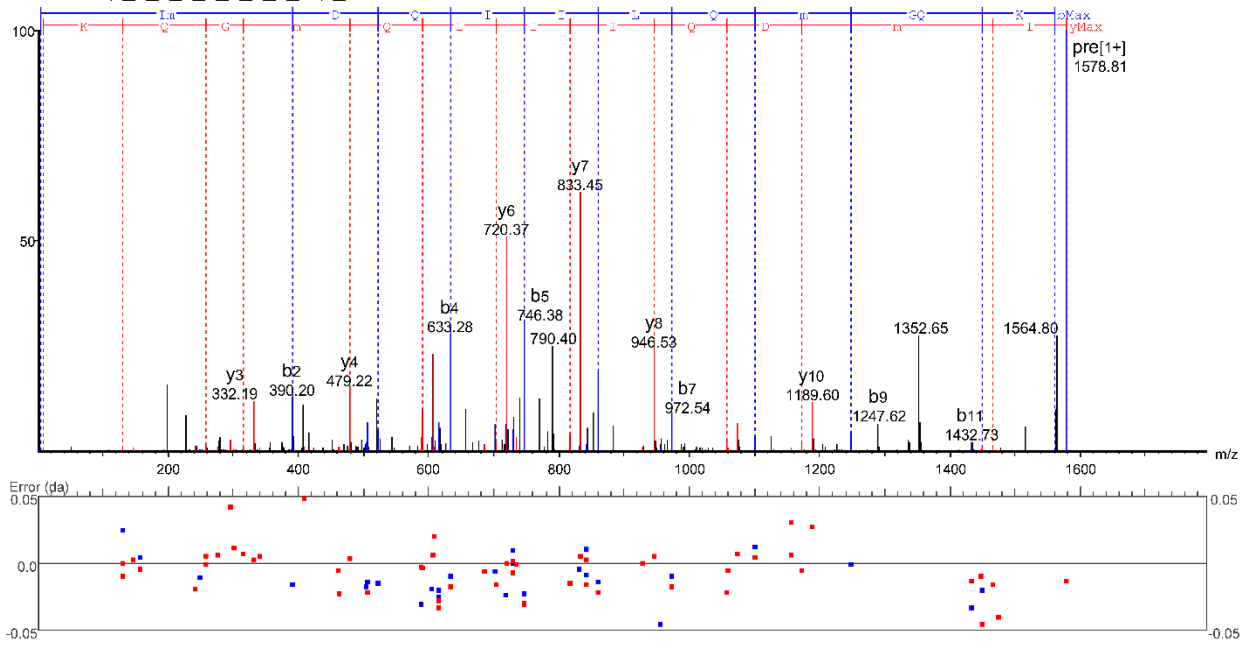
0% rel.intensity 100%

XL-MS spectra of tag-transfer crosslinks detected between SurA and OmpX.





Intensity (%) I m D Q I I L Q m G Q K



Intensity (%) s D E Q L D Q A I A N I A K

