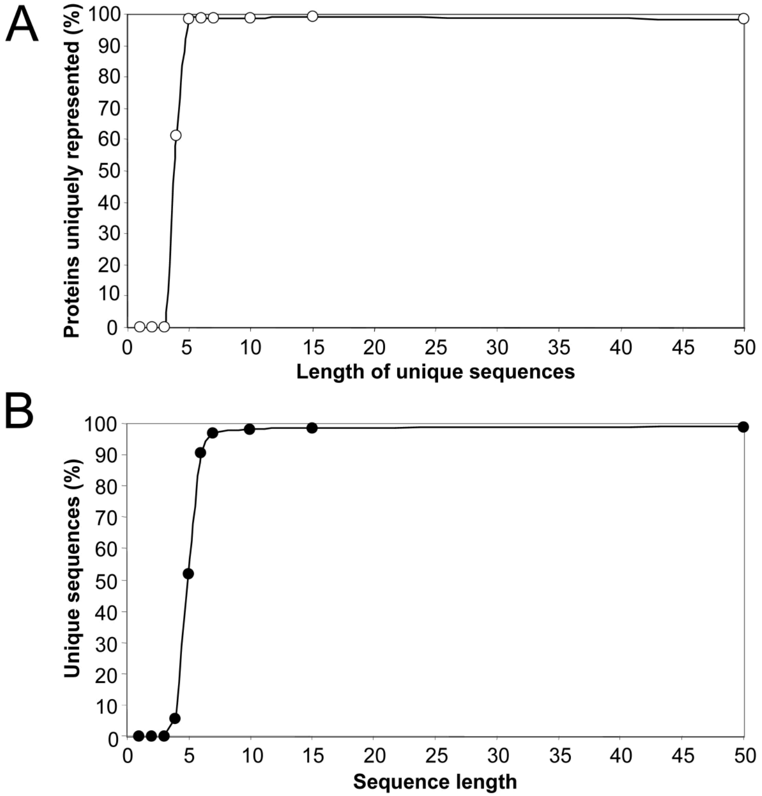
Type of file: figure
Label: 1
Filename: UStag_SupFig1_Shen.jpg



Supplementary Figure 1.

Type of file: figure
Label: 10
Filename: UStag_SupFig10_Shen.jpg

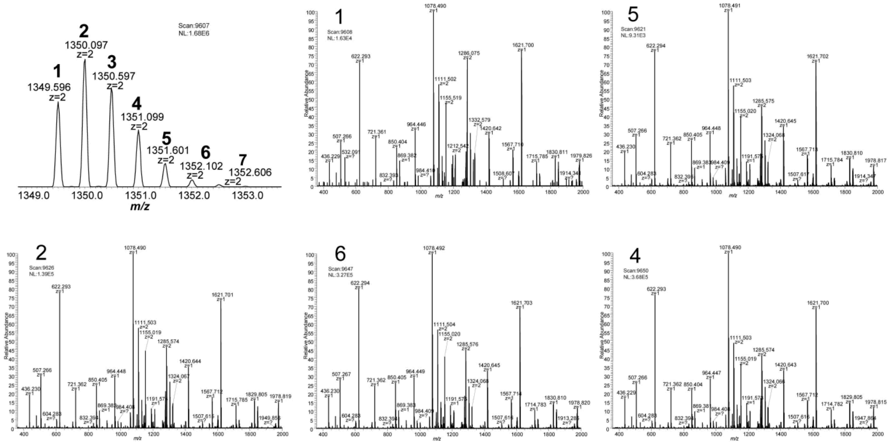
```
•Input:
1, ..., n        //spectra (peaks)
1, ...,10        //SEQUEST candidates
1, ..., m        //list of residual replacements used in RRF
Mp               //molecular mass error threshold
Ms               //residual sequencing error threshold

•Processing:
for every candidate
        if correct parent mass (within the Mp of expected)
           generate b and y fragment masses
           identify fragments (within the Ms of expected residue mass)
           use consecutive fragments to produce sequence tags
           for every tag
               use RRF to determine if UStag
           if at least one tag is UStag
               candidate is identified
        else
           explore modifications with obtained Stags and delta mass

•Output:
UStags-based unambiguous identifications
```

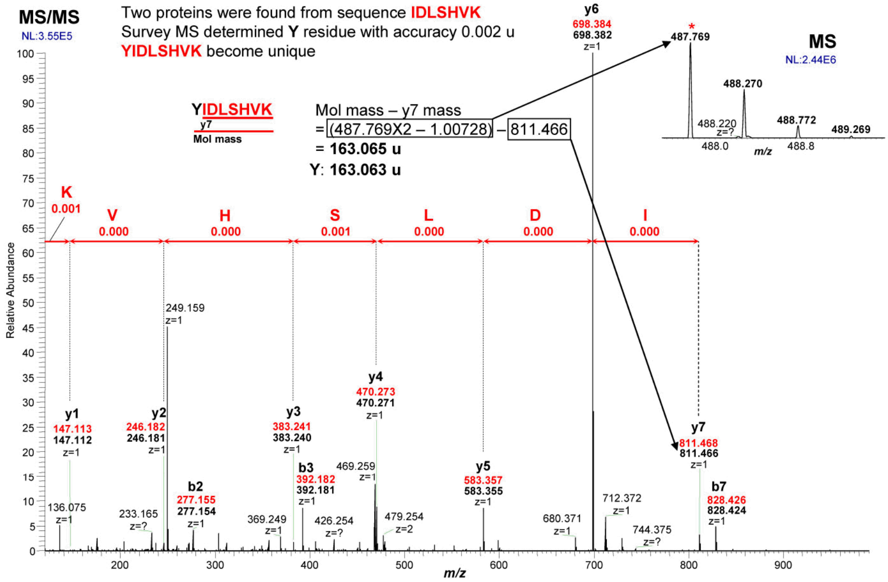
Supplementary Figure 10.

Type of file: figure
Label: 2
Filename: UStag_SupFig2_Shen.jpg



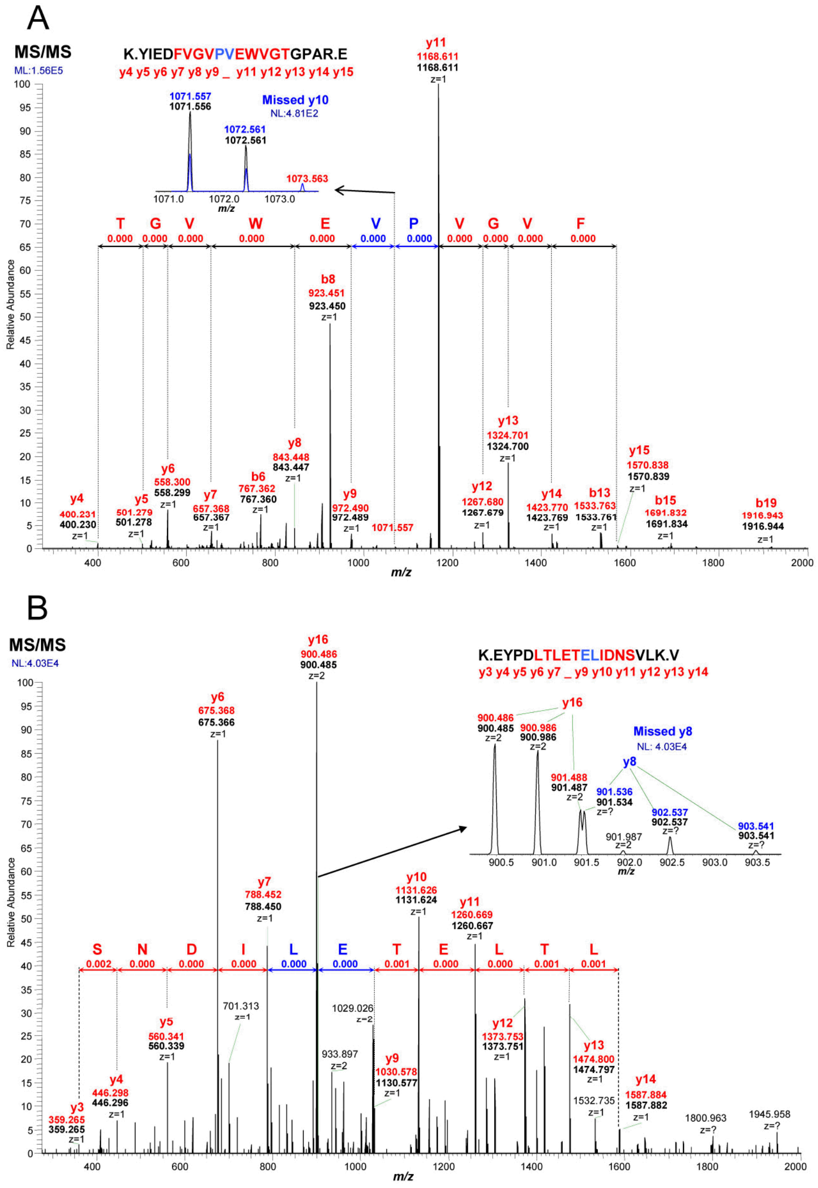
Supplementary Figure 2.

Type of file: figure
Label: 3
Filename: UStag_SupFig3_Shen.jpg



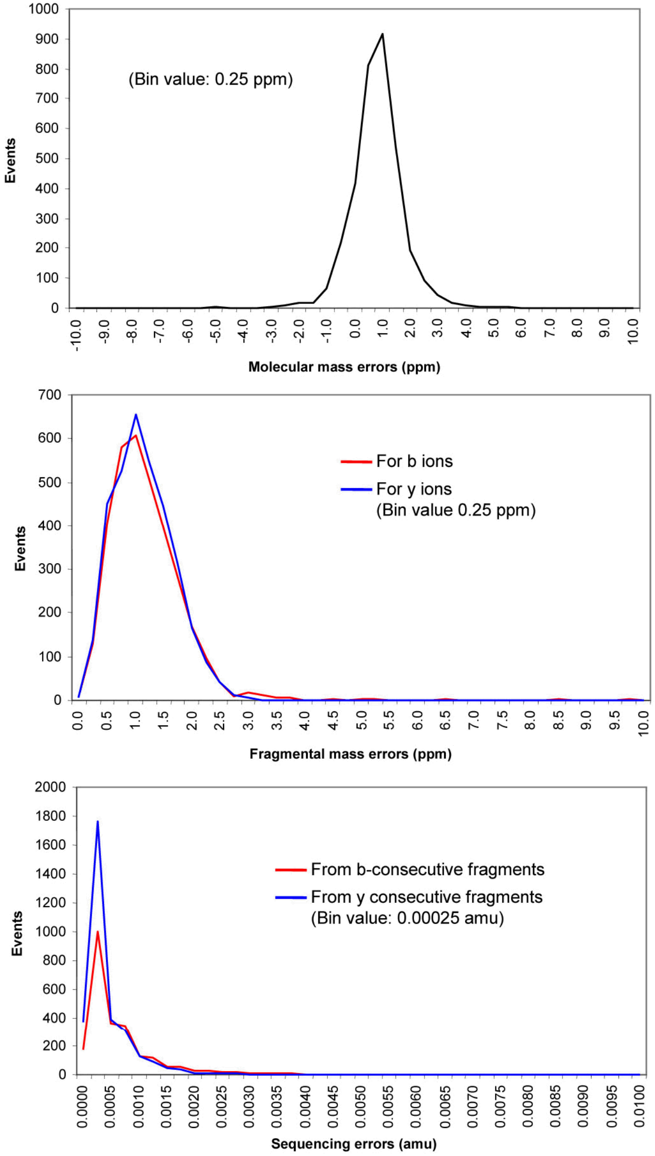
Supplementary Figure 3.

Type of file: figure
Label: 4
Filename: UStag_SupFig4_Shen.jpg



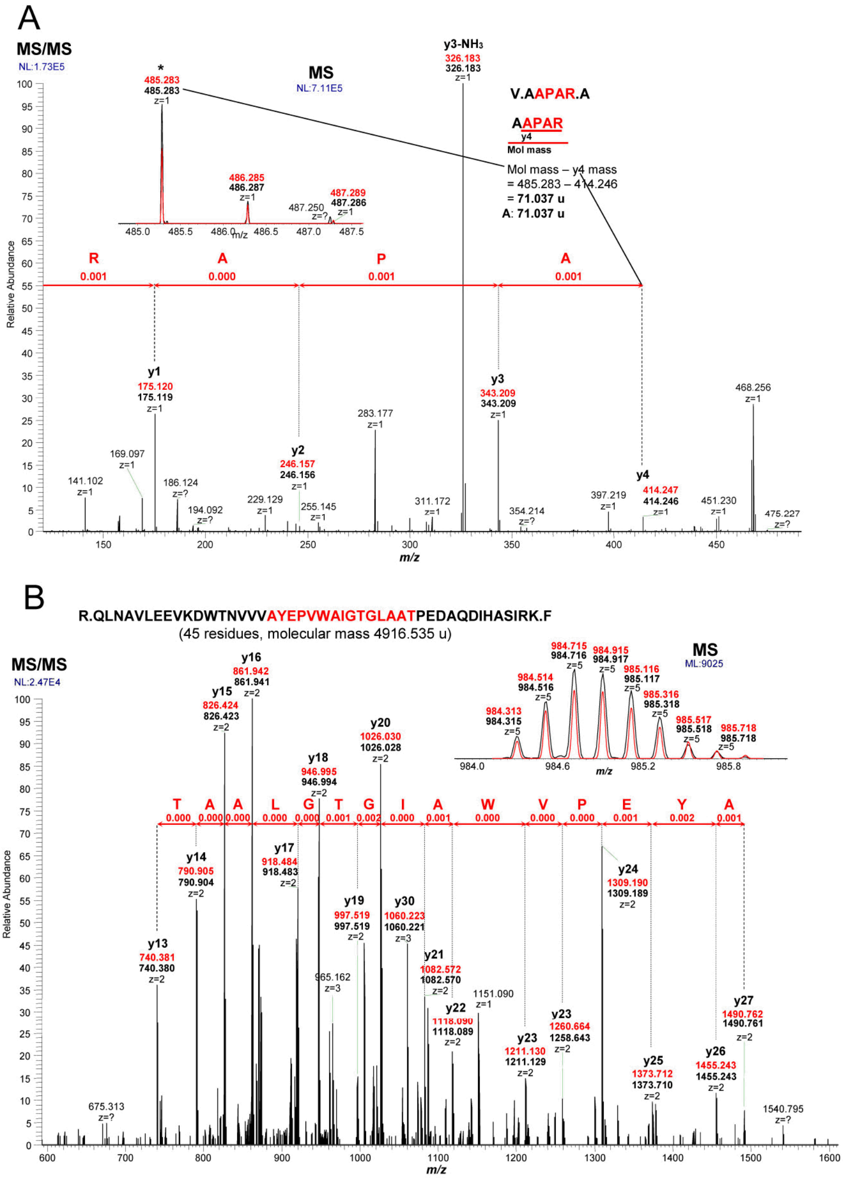
Supplementary Figure 4.

Type of file: figure
Label: 5
Filename: UStag_SupFig5_Shen.jpg



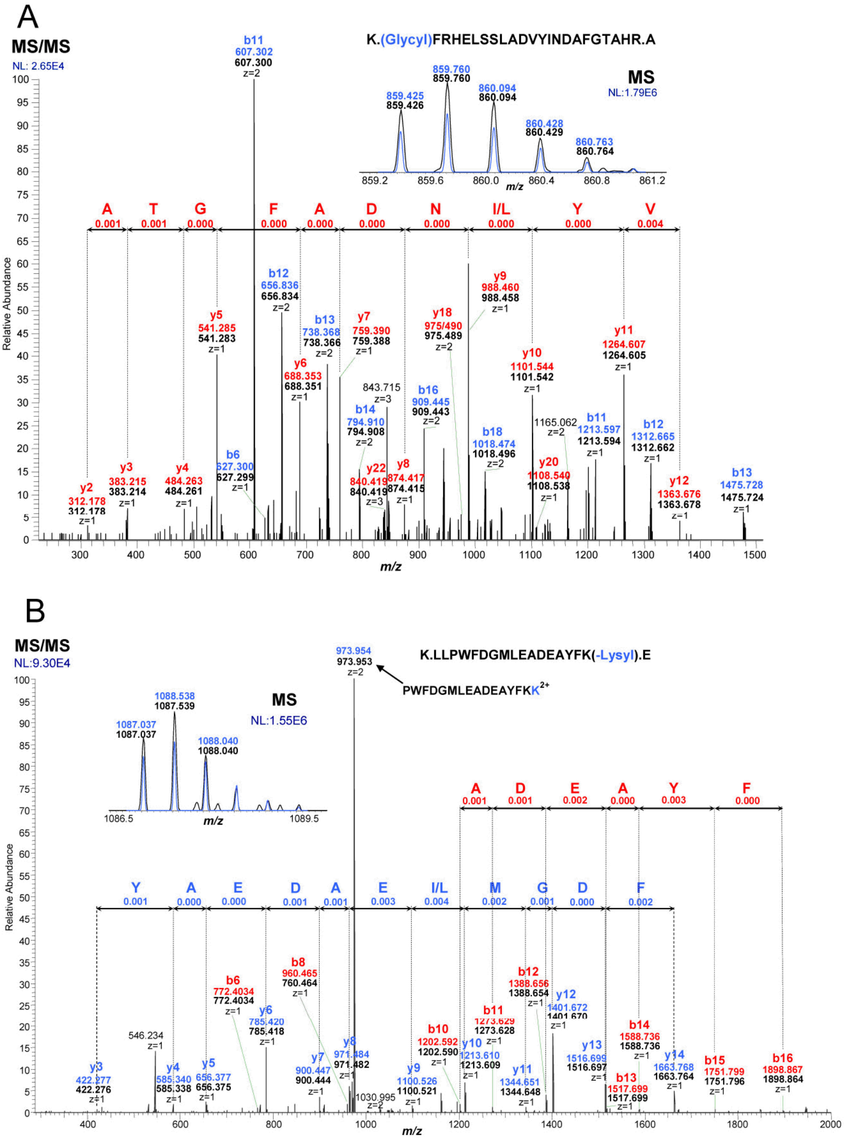
Supplementary Figure 5.

Type of file: figure
Label: 6
Filename: UStag_SupFig6_Shen.jpg



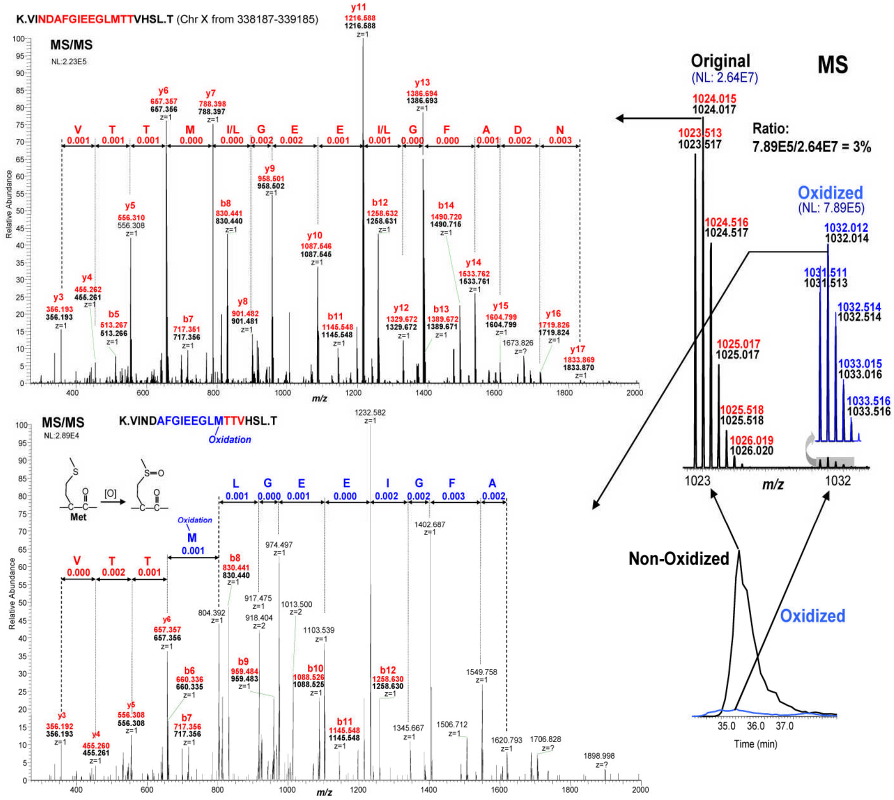
Supplementary Figure 6.

Type of file: figure
Label: 7
Filename: UStag_SupFig7_Shen.jpg



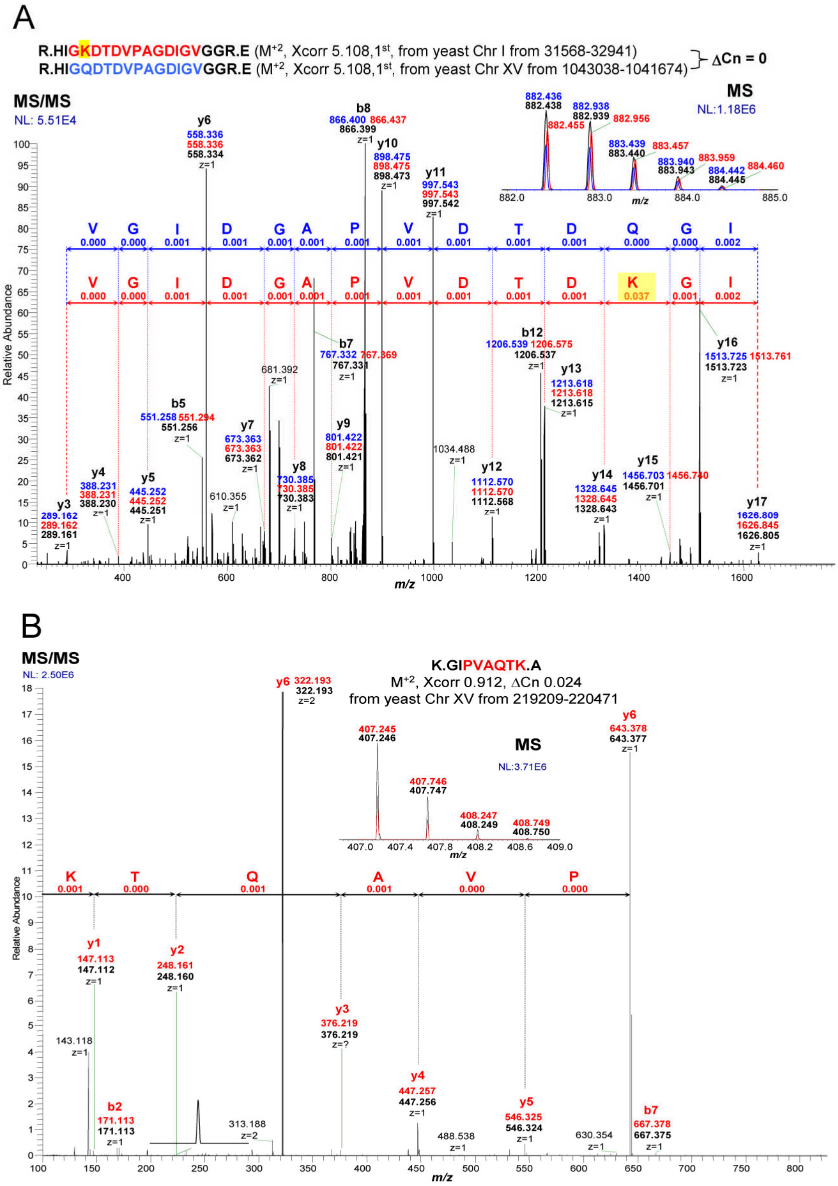
Supplementary Figure 7.

Type of file: figure
Label: 8
Filename: UStag_SupFig8_Shen.jpg



Supplementary Figure 8.

Type of file: figure
Label: 9
Filename: UStag_SupFig9_Shen.jpg



Supplementary Figure 9.