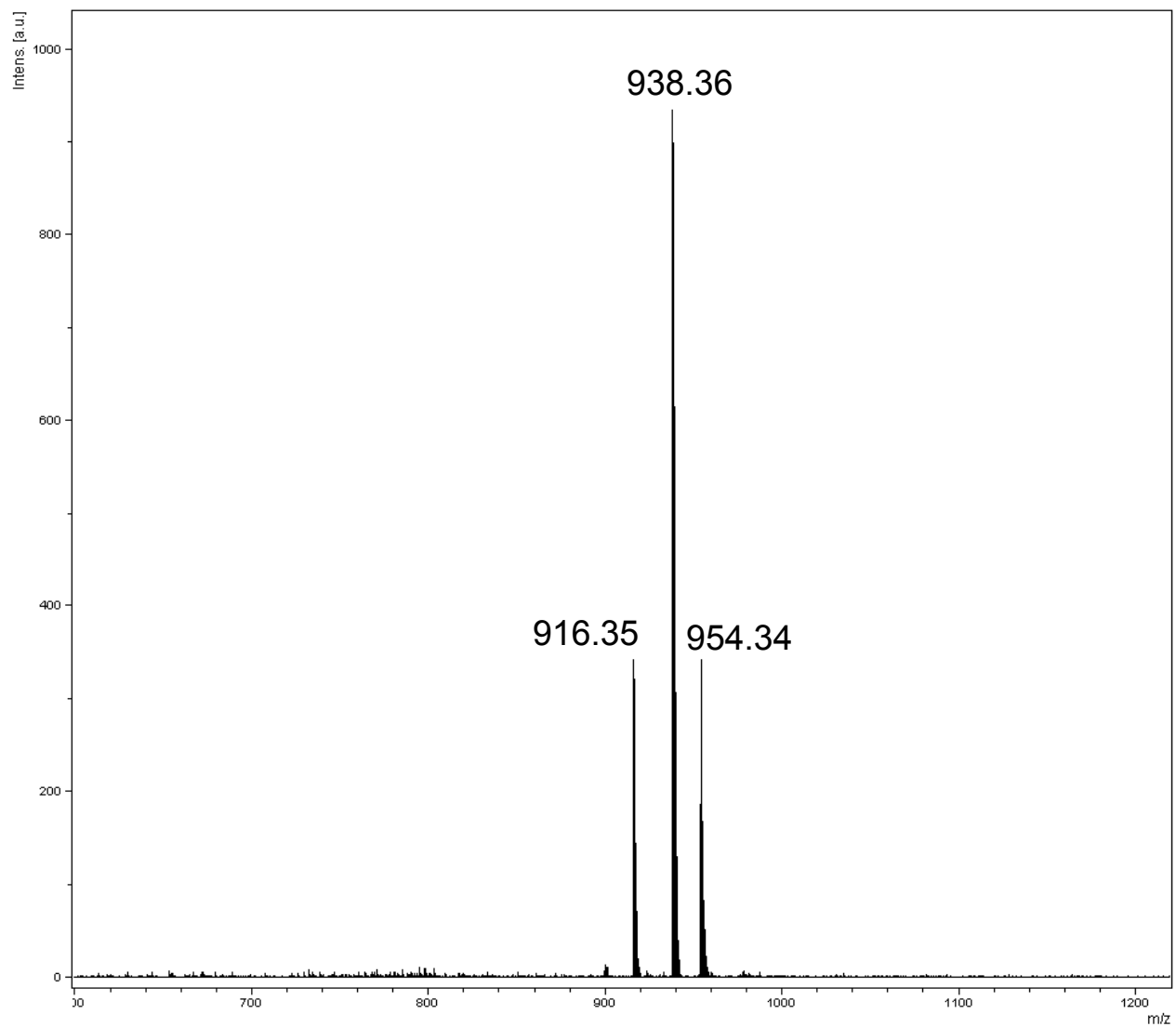
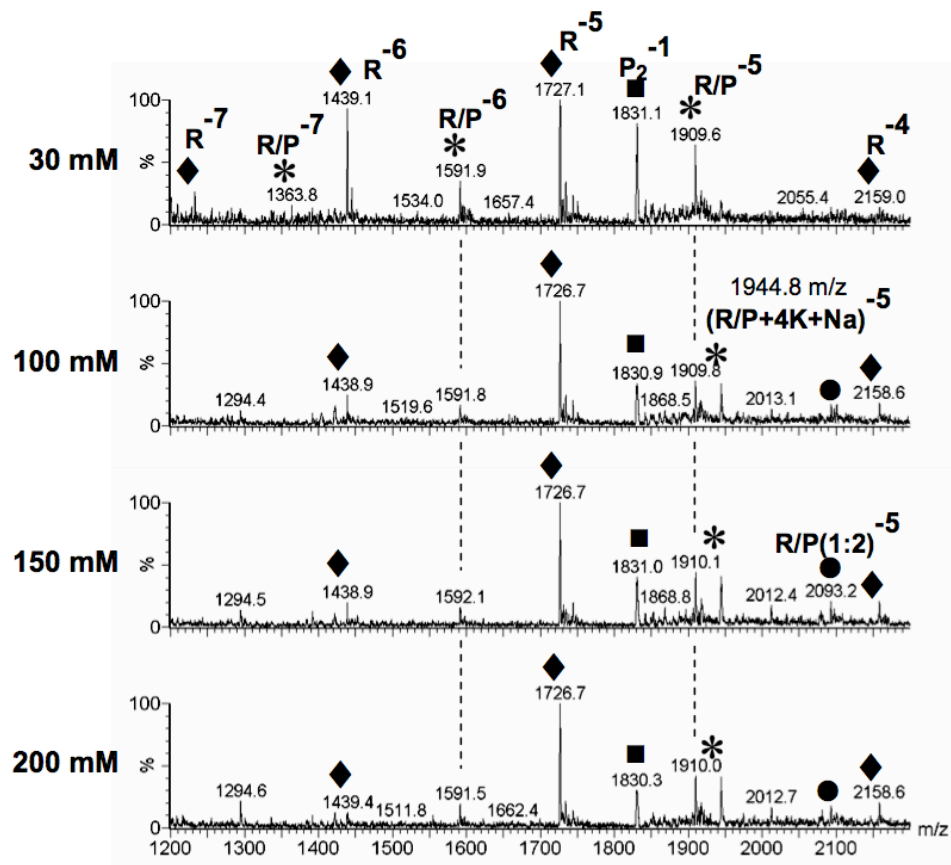


Figure S1



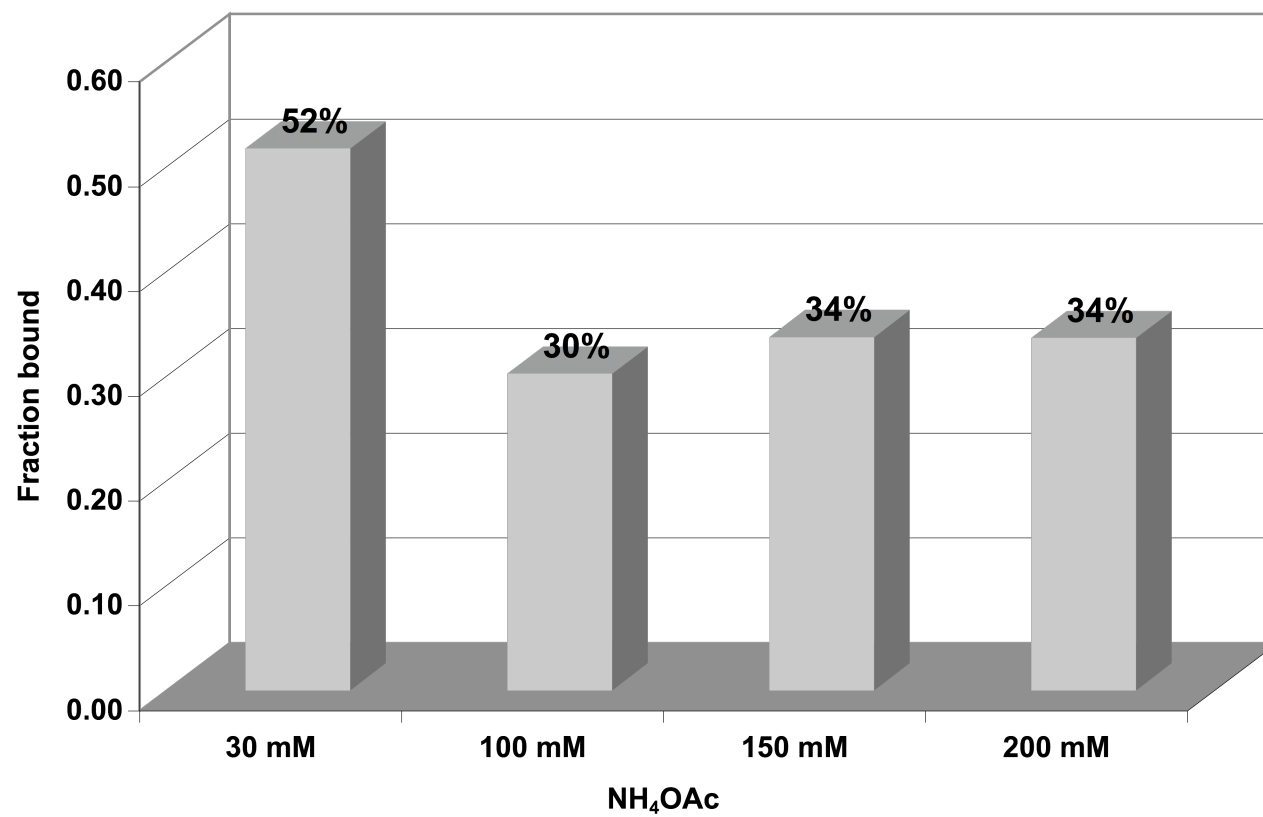
MALDI-TOF characterization of peptide HPVHHYQ-NH<sub>2</sub> is given: calculated mass: 915.4 g/mol; observed mass, 916.35 (M+H<sup>+</sup>), 938.36 (M+Na<sup>+</sup>), and 954.34 (M+K<sup>+</sup>).

Figure S2



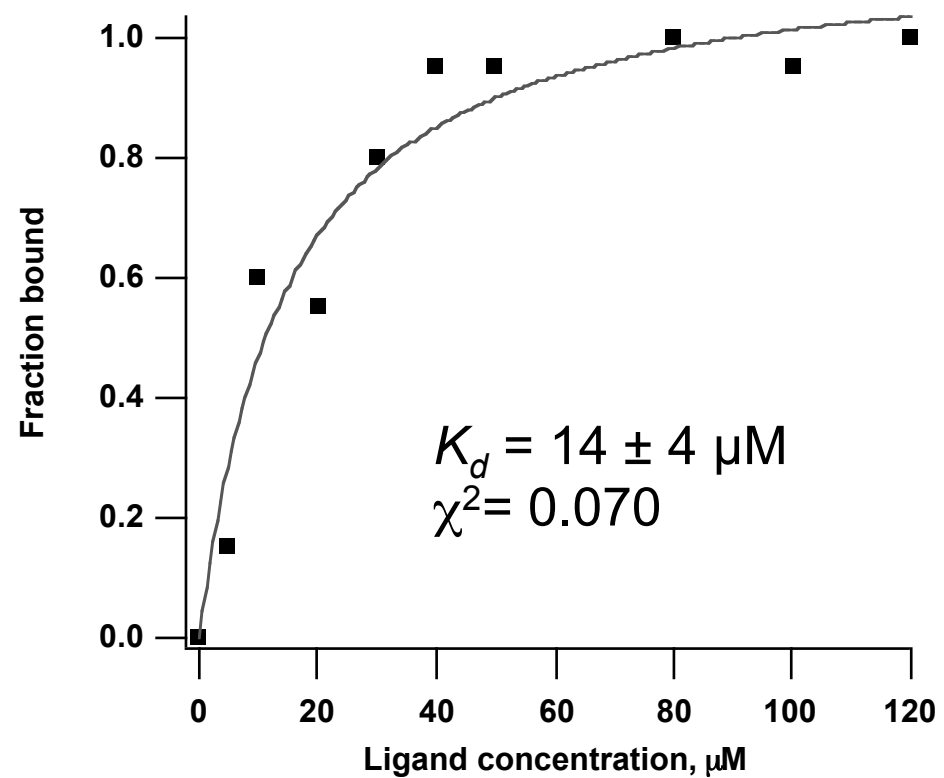
The mass spectra of the peptide HPVHHYQ-NH<sub>2</sub> (34  $\mu\text{M}$ ) binding to the A-site RNA (1  $\mu\text{M}$ ) at 30, 100, 150 and 200 mM  $\text{NH}_4\text{OAc}$  are shown. The free RNA (R) at various charge states (-5, -6, etc.) are labeled with diamonds (◆). The RNA-peptide complexes (R/P) are labeled with stars (\*) for 1:1 and circles (●) for 1:2 complexes. The peptide dimer (P<sub>2</sub>) is designated with squares (■).

Figure S3



A bar graph shows the population of RNA-peptide complexes (from data shown in Figure S2) formed with increasing concentrations of  $\text{NH}_4\text{OAc}$ .

Figure S4



The plot shows RNase A cleavage of hp-AS at A1493 fit with Equation 1.