



Supplemental Figure S1: AtCsaA binds the synthetic X15 peptide *in vitro*. Shown are the superimposed ^1H - ^{15}N HSQC spectra of uniformly ^{15}N -labeled AtCsaA (0.9 mM protein in 20 mM potassium phosphate buffer, pH 6.5, 25 °C) in the absence (blue peaks) and presence (red peaks) of 0.9 mM X15 peptide. Aliased peaks (negative) are cyan and green, respectively. The dispersion and linewidths of the peaks in the spectrum of free AtCsaA are as expected for a well folded 28 kDa symmetrical dimeric protein. The spectral changes occurring upon addition of X15 reflect structural perturbations due to peptide binding. Data were recorded with a Varian Inova 600 MHz NMR spectrometer.



Supplementary Figure S2. A C_{α} trace of the superposition of the X15peptide-AtCsaA (blue) and AtCsaA (red) structures. The two structures superimpose with an r.m.s.d. of 0.76 Å over 219 α -carbons.