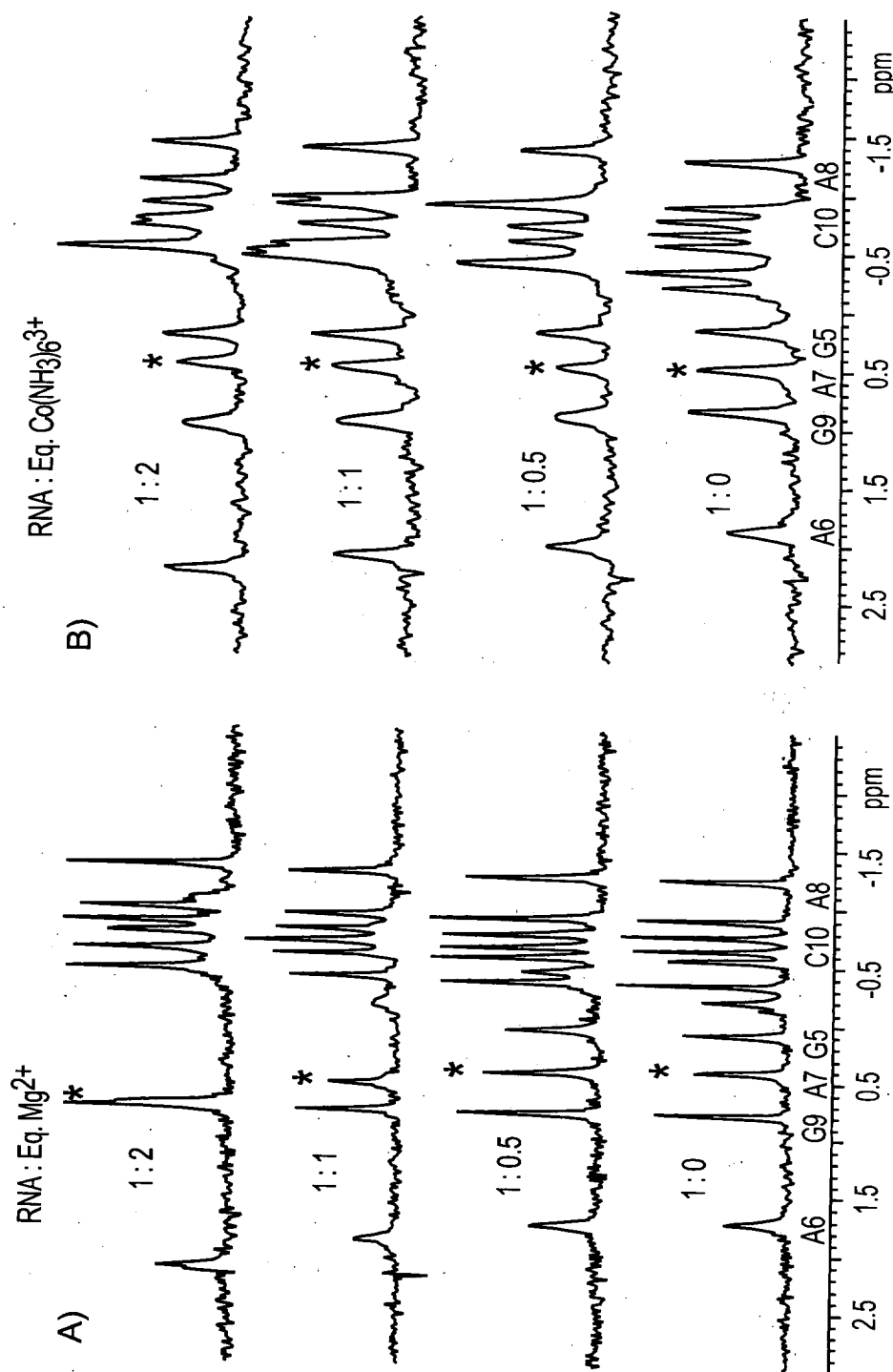


Supporting Information Figure 1

Effect of added Mg^{2+} and $Co(NH_3)_6^{3+}$ on the ^{31}P NMR spectrum of the unmodified CG-WT hairpin. A) ^{31}P NMR spectra in the presence of 1.57 mM RNA in 0, 0.5, 1, and 2 equivalents of Mg^{2+} . B) ^{31}P NMR spectra in the presence of 0.36 mM RNA in 0, 0.5, 1, and 2 equivalents of $Co(NH_3)_6^{3+}$. Spectra were obtained at 121 MHz. * denotes the peak assigned to the A7 phosphate.



Supporting Information Figure 2

Effect of added Cd^{2+} on the ^{31}P NMR spectrum of a phosphorothioate-modified CG hairpin ($\text{CG-R}_p\text{-A}_{6,7,8}$ RNA). ^{31}P NMR spectra of the phosphorothioate modified region of A) 1 mM RNA, B) 0.5 mM RNA and 0.5 equivalents of Cd^{2+} , C) 0.5 mM RNA and 1.5 equivalents of Cd^{2+} , and D) 0.5 mM RNA and 5 equivalents of Cd^{2+} . Spectra were obtained at 121 MHz. * denotes the peak assigned to the A7 phosphate.

