Supporting Information

A benzimidazole/benzothiazole-based electrochemical chemosensor for nanomolar detection of guanine

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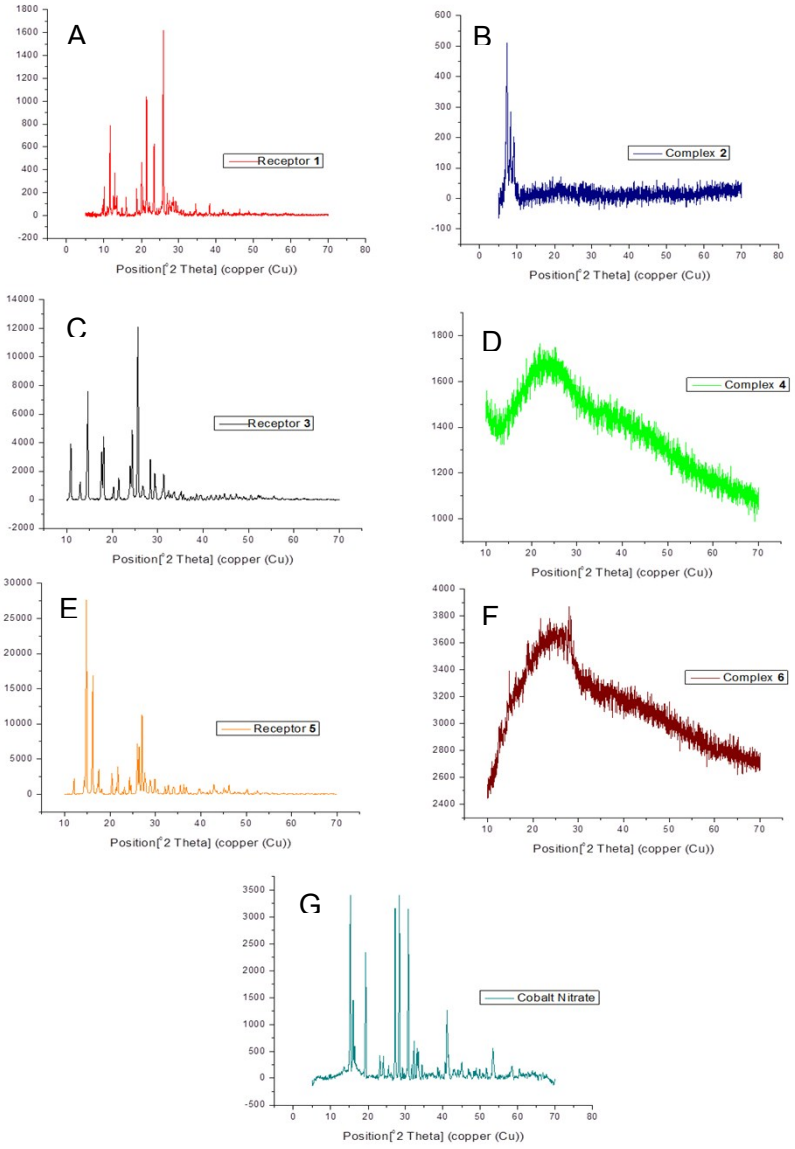

Figure S1. PXRD patterns of receptors **1**, **3** and **5** (A, C and E), cobalt complexes **2**, **4** and **6** (B, D and E), and cobalt nitrate (G).

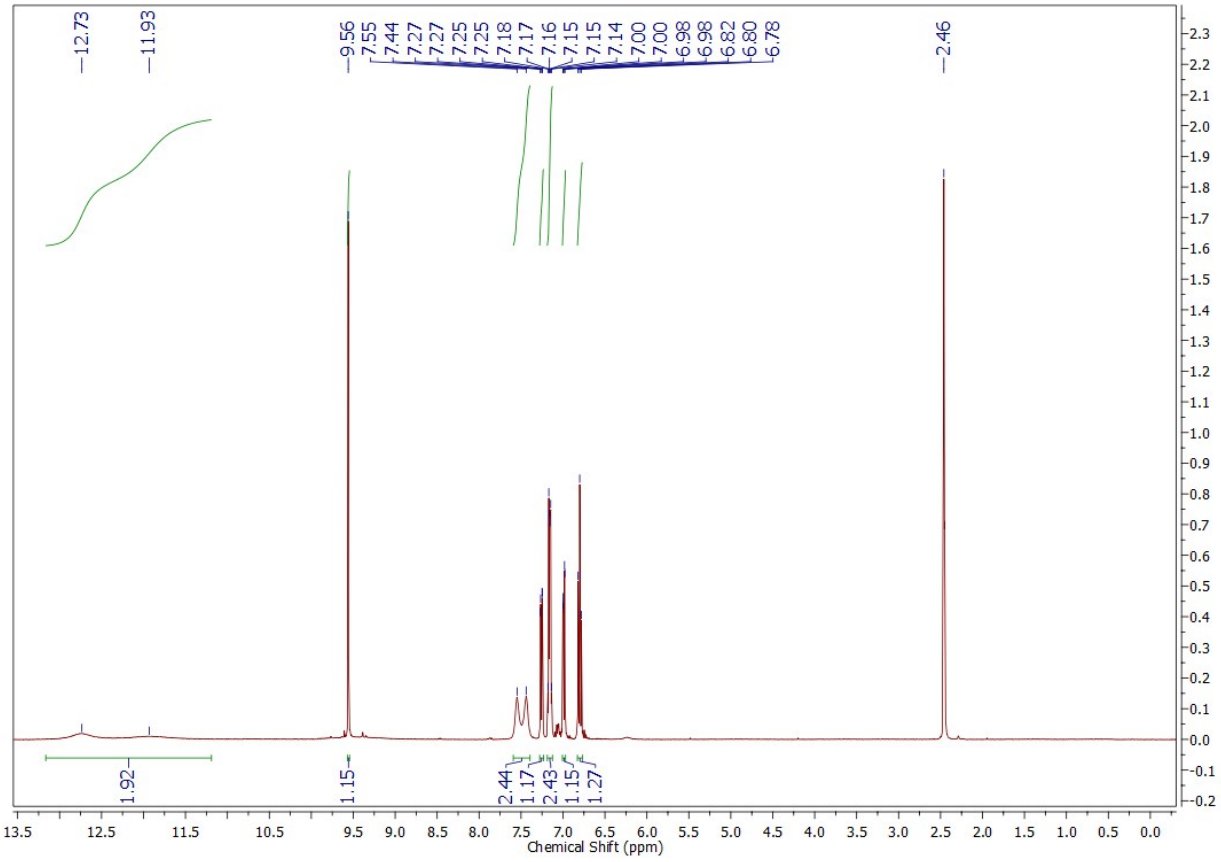

Figure S2. ^{1}H NMR of receptor **1**.

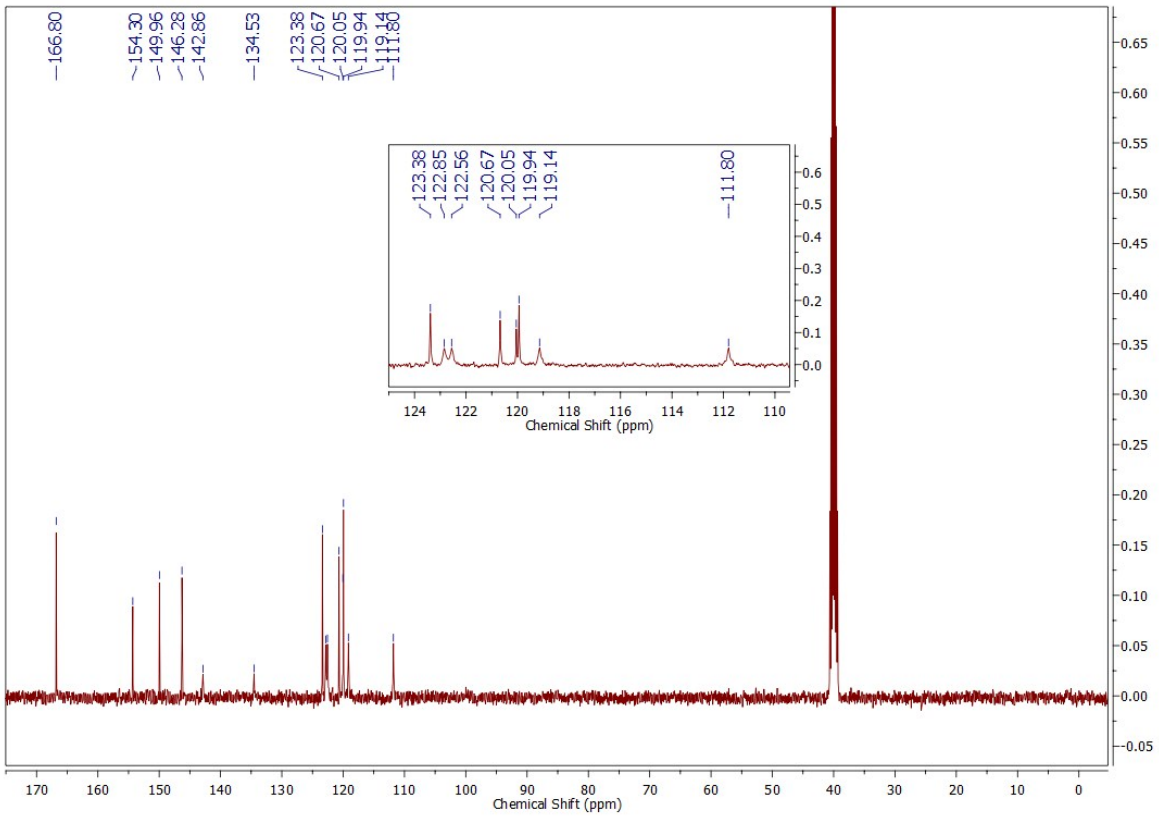

Figure S3. ^{13}C NMR of receptor **1**.

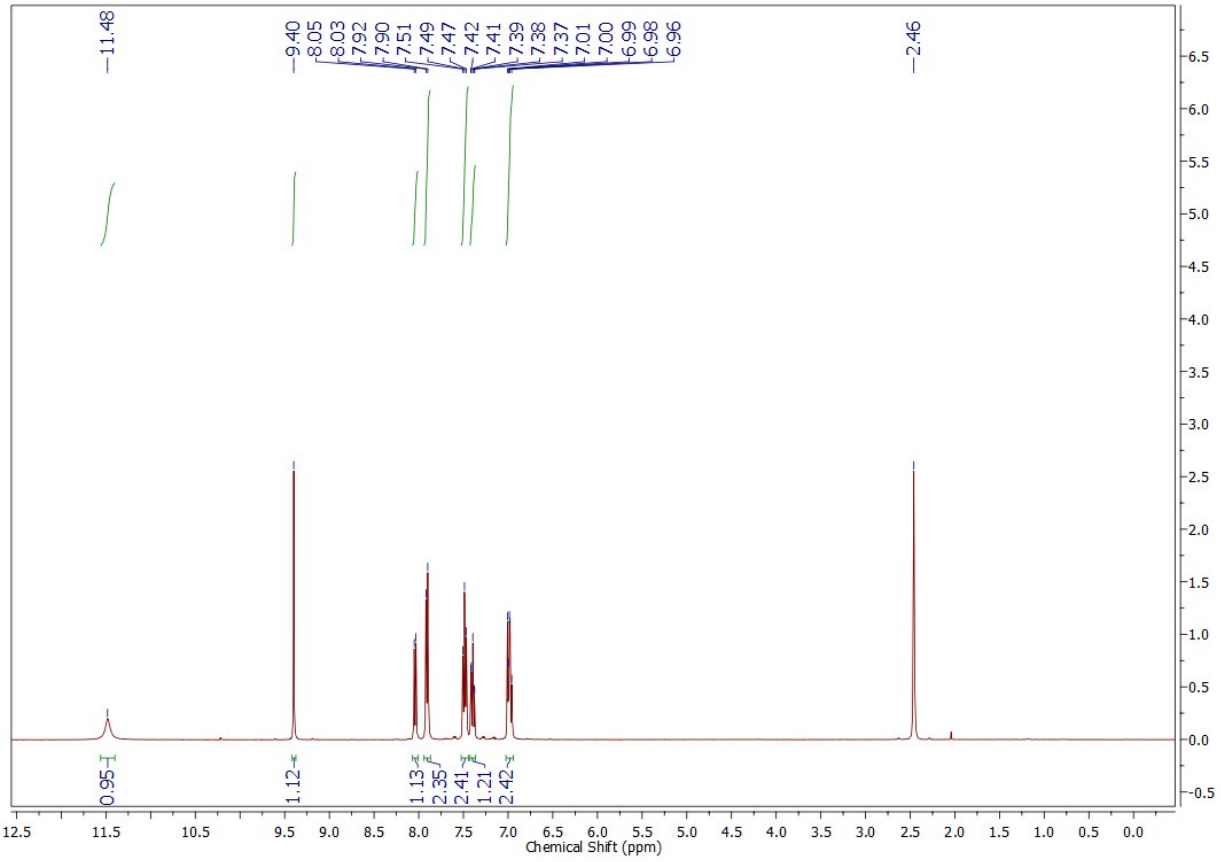

Figure S4. ^{1}H NMR of receptor **3**.

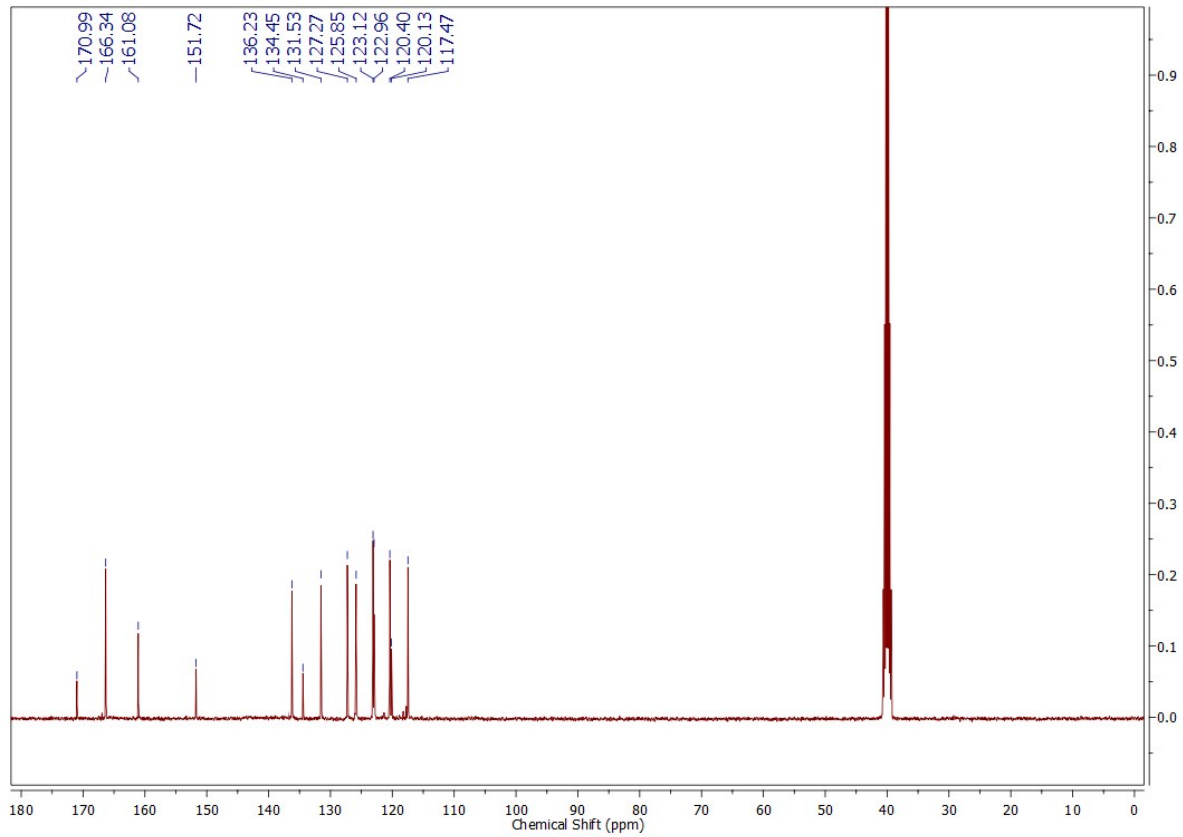

Figure S5. ^{13}C NMR of receptor **3**.

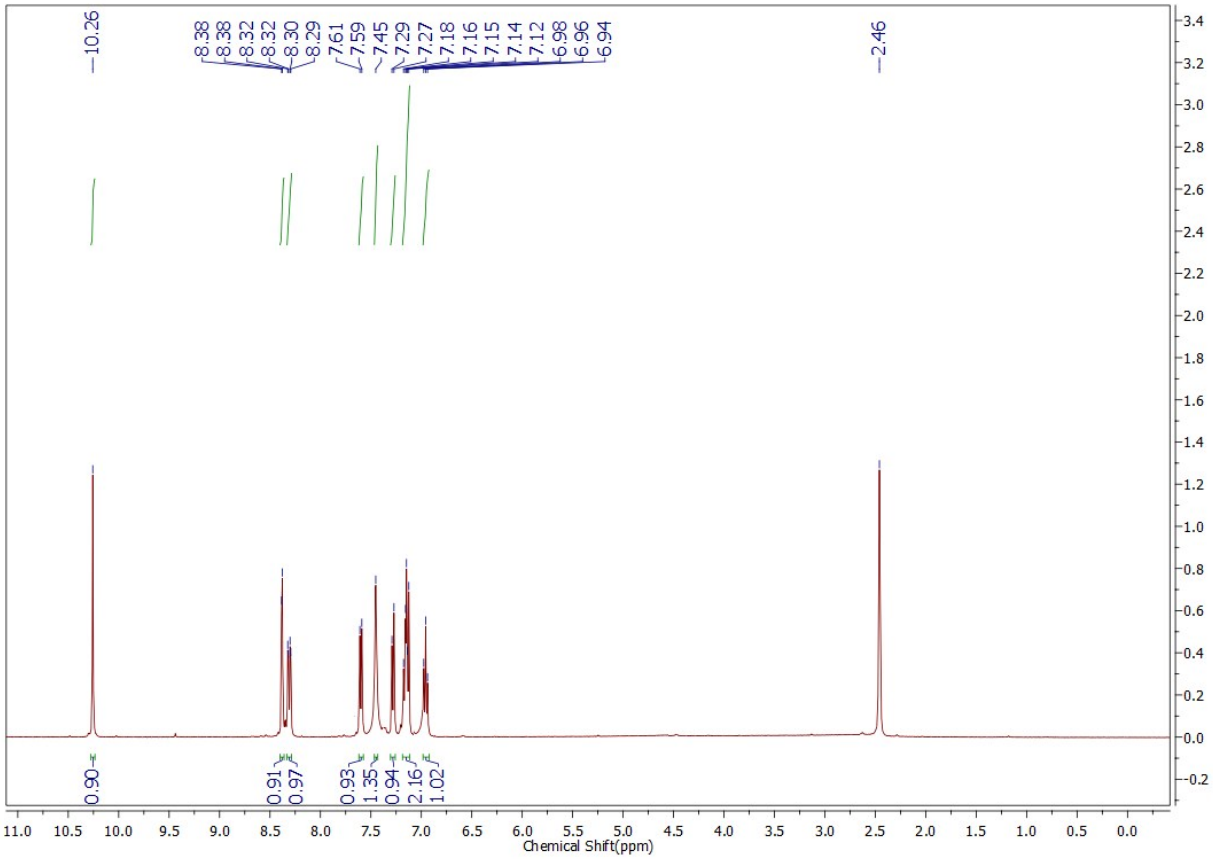

Figure S6. ^{1}H NMR of receptor **5**.

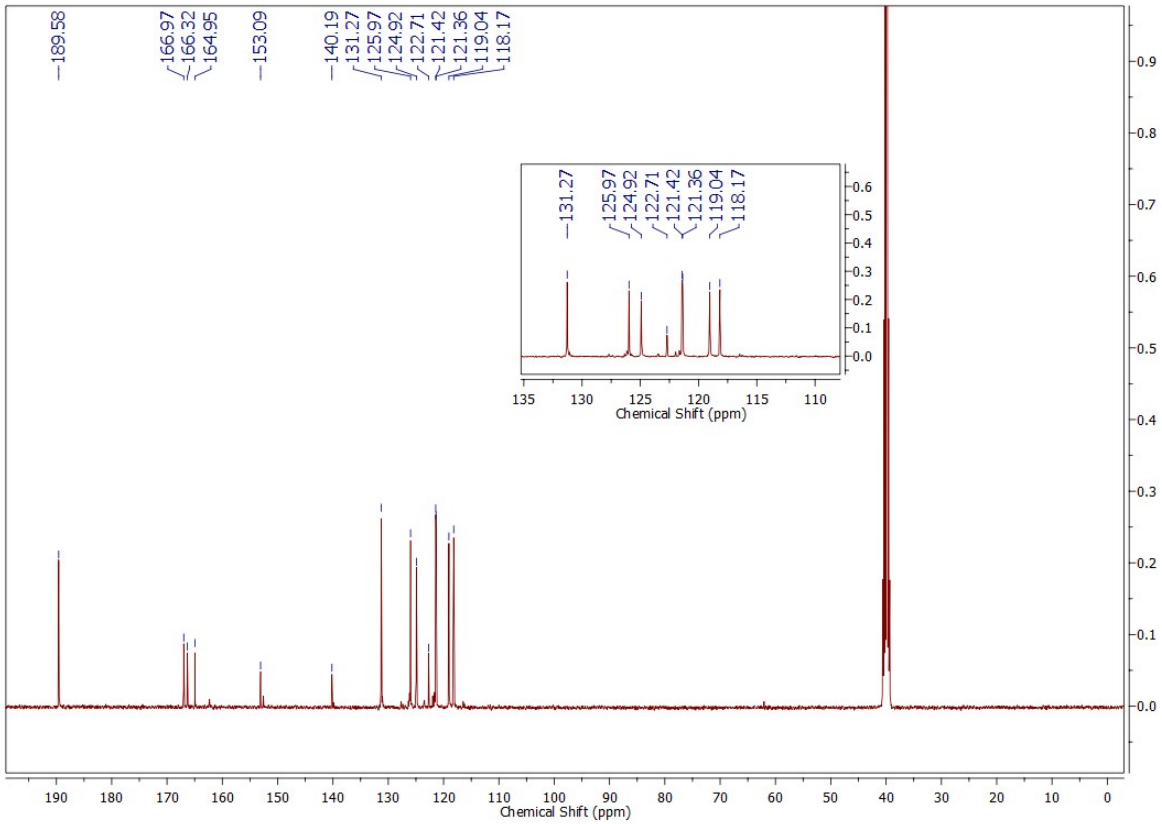

Figure S7. ^{13}C NMR of receptor **5**.

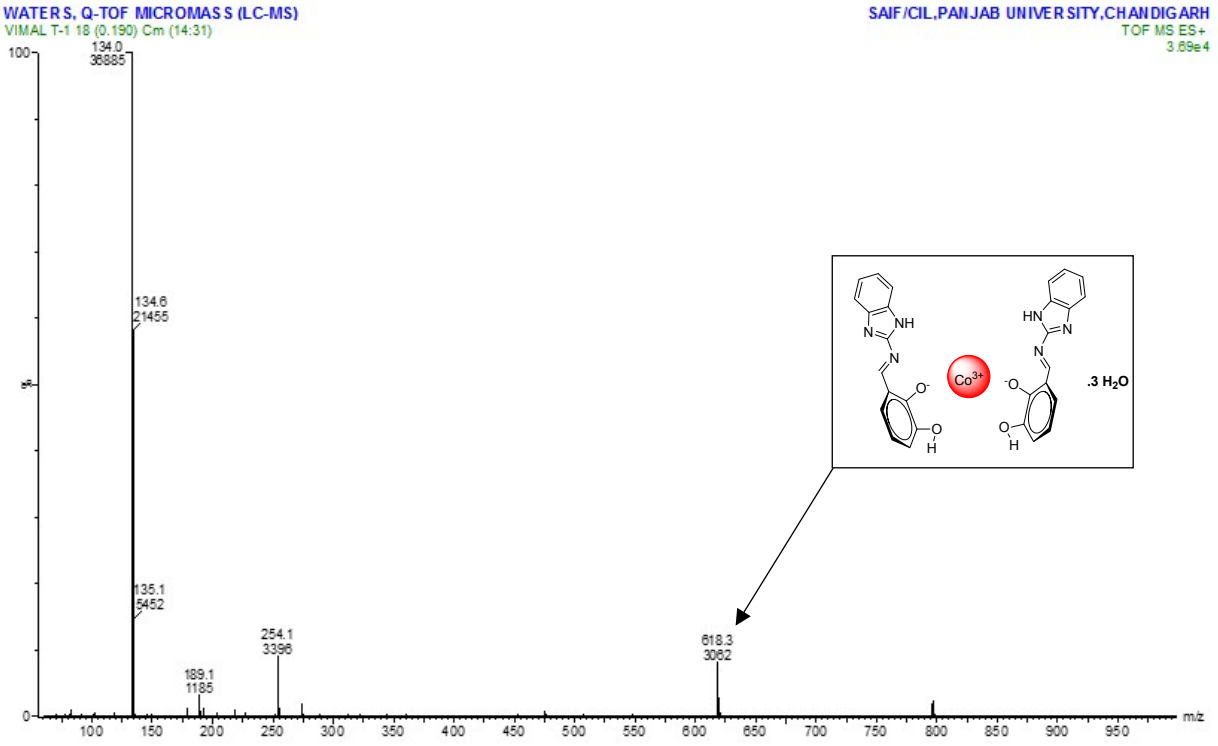

Figure S8. Mass spectra of complex **2**.

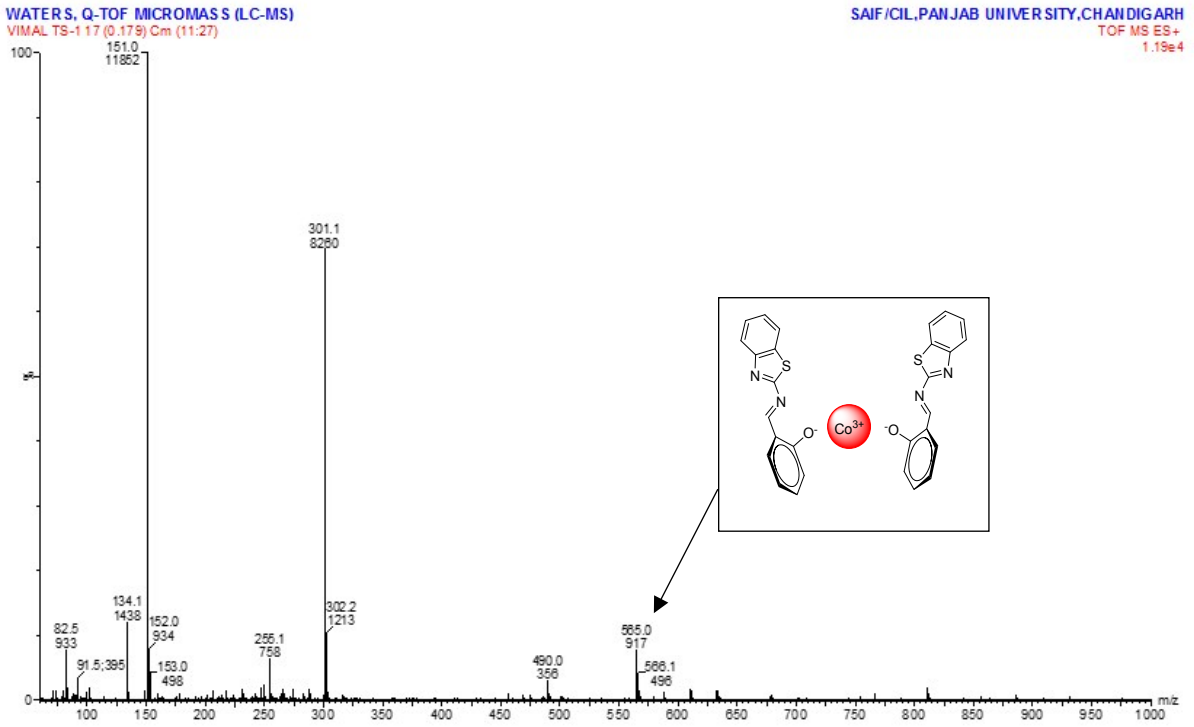

Figure S9. Mass spectra of complex **4**.

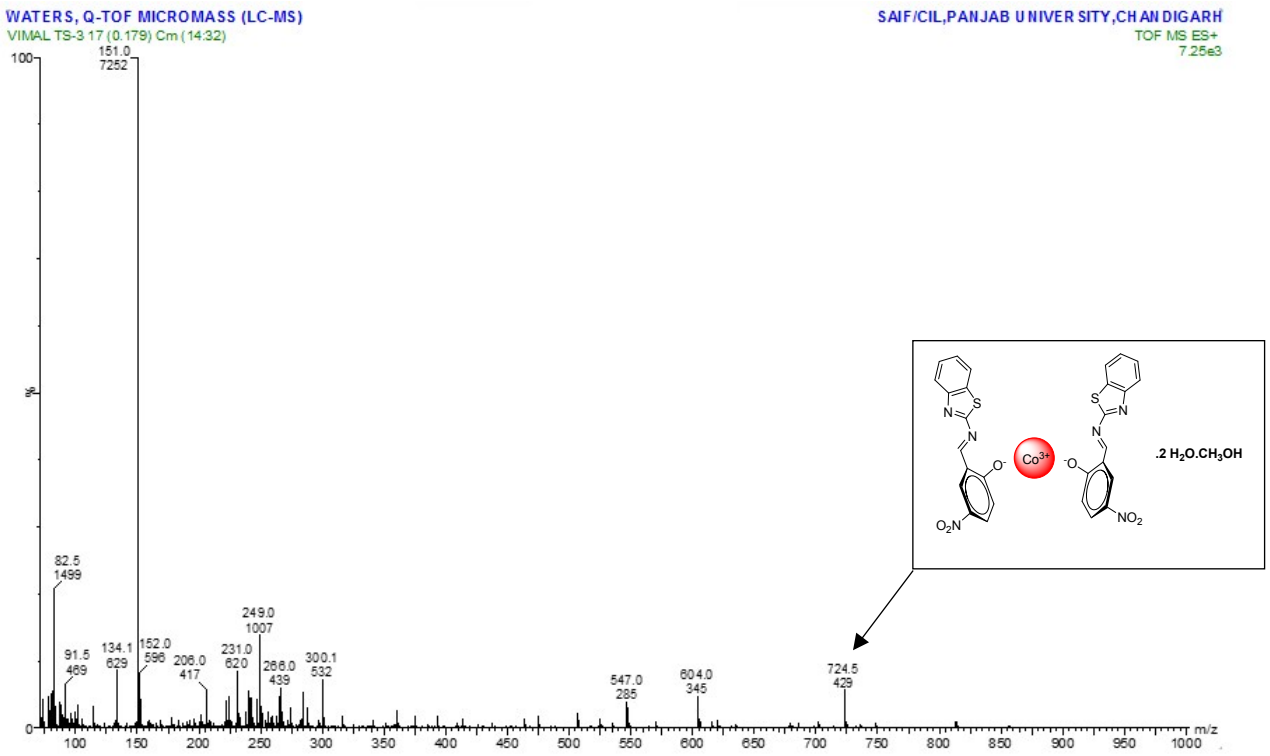

Figure S10. Mass spectra of complex **6**.

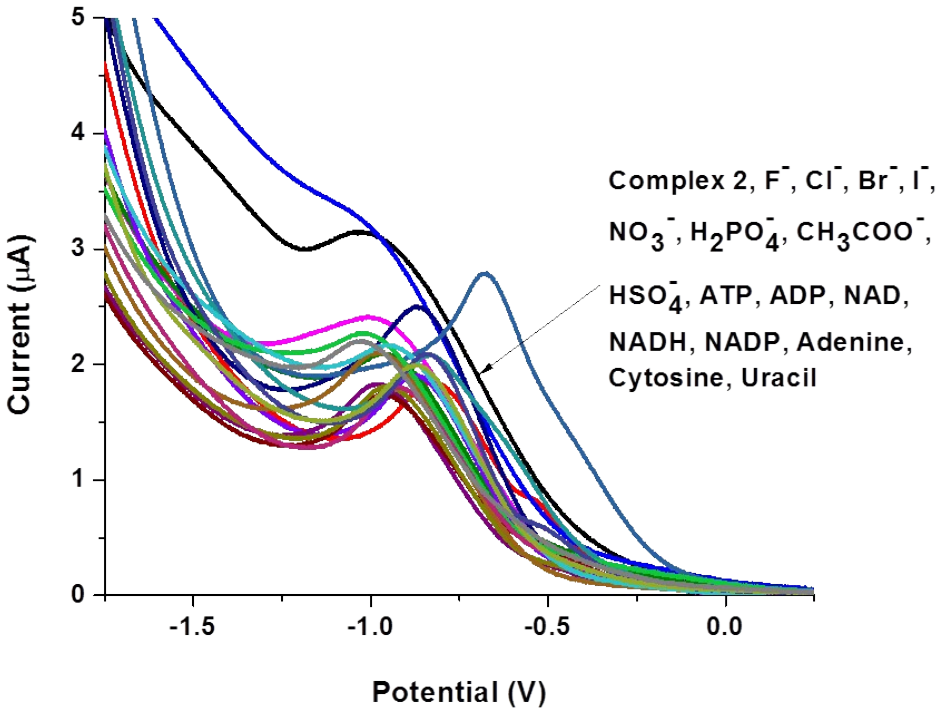

Figure S11. Linear sweep voltammogram of complex **2** (10 μM) in the presence of various tetrabutylammonium anion salts and biomolecules (30 μM) in a DMSO/H_2O (8:2, v/v) solvent system.

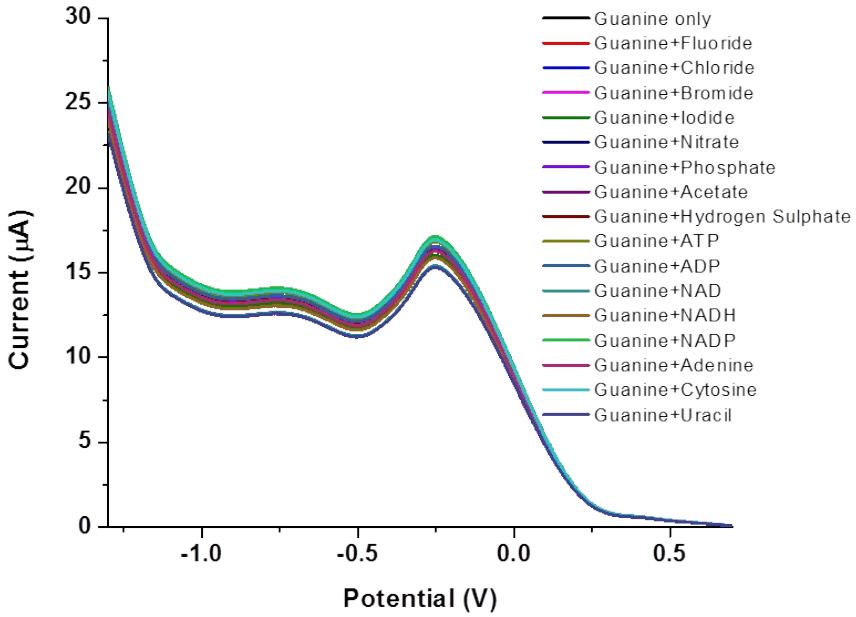

Figure S12. SV profile of complex 6 upon addition of guanine in the presence or absence of equal molar of various competing anions and biomolecules.

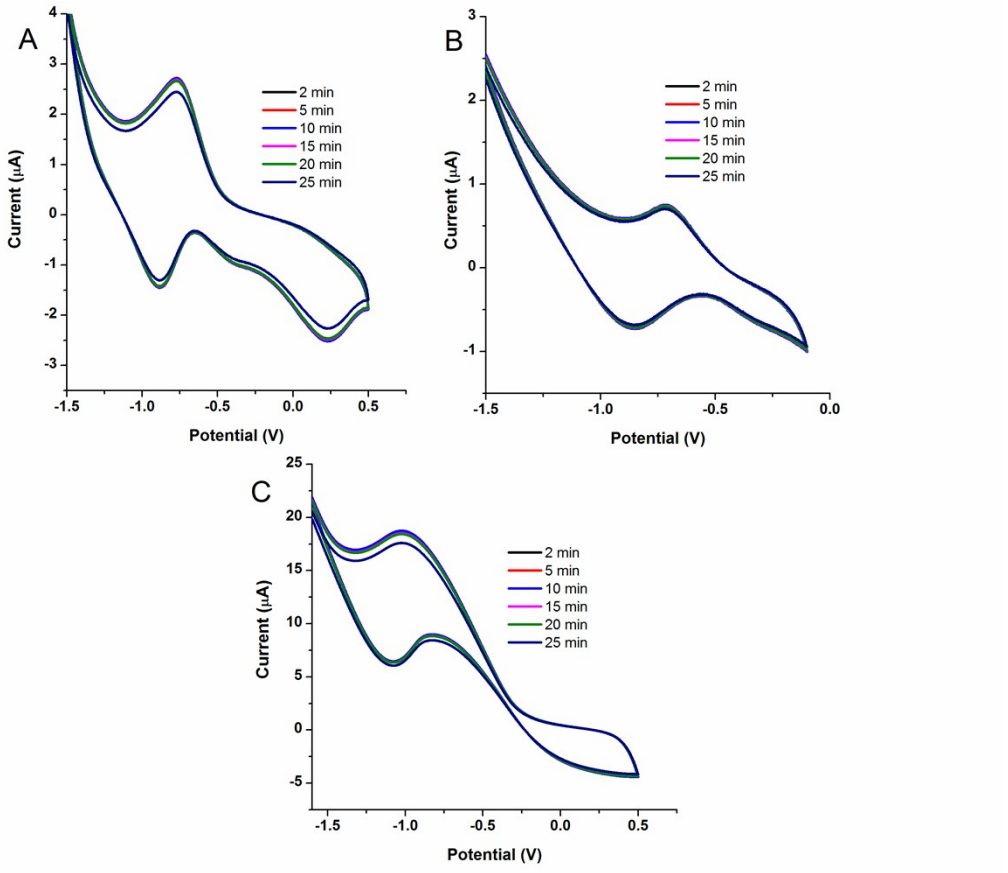

Figure S13. Cyclic voltammogram of (A) complex **2** (10 μM), (B) complex **4** (10 μM) and (C) complex **6** (10 μM) at different interval of time, respectively.