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).

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**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/H₂O (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.