Supporting Information

Synthesis and characterization of Conducting Polymers Containing Polypeptide and Ferrocene Side Chains as Ethanol Biosensors

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Table of Contents

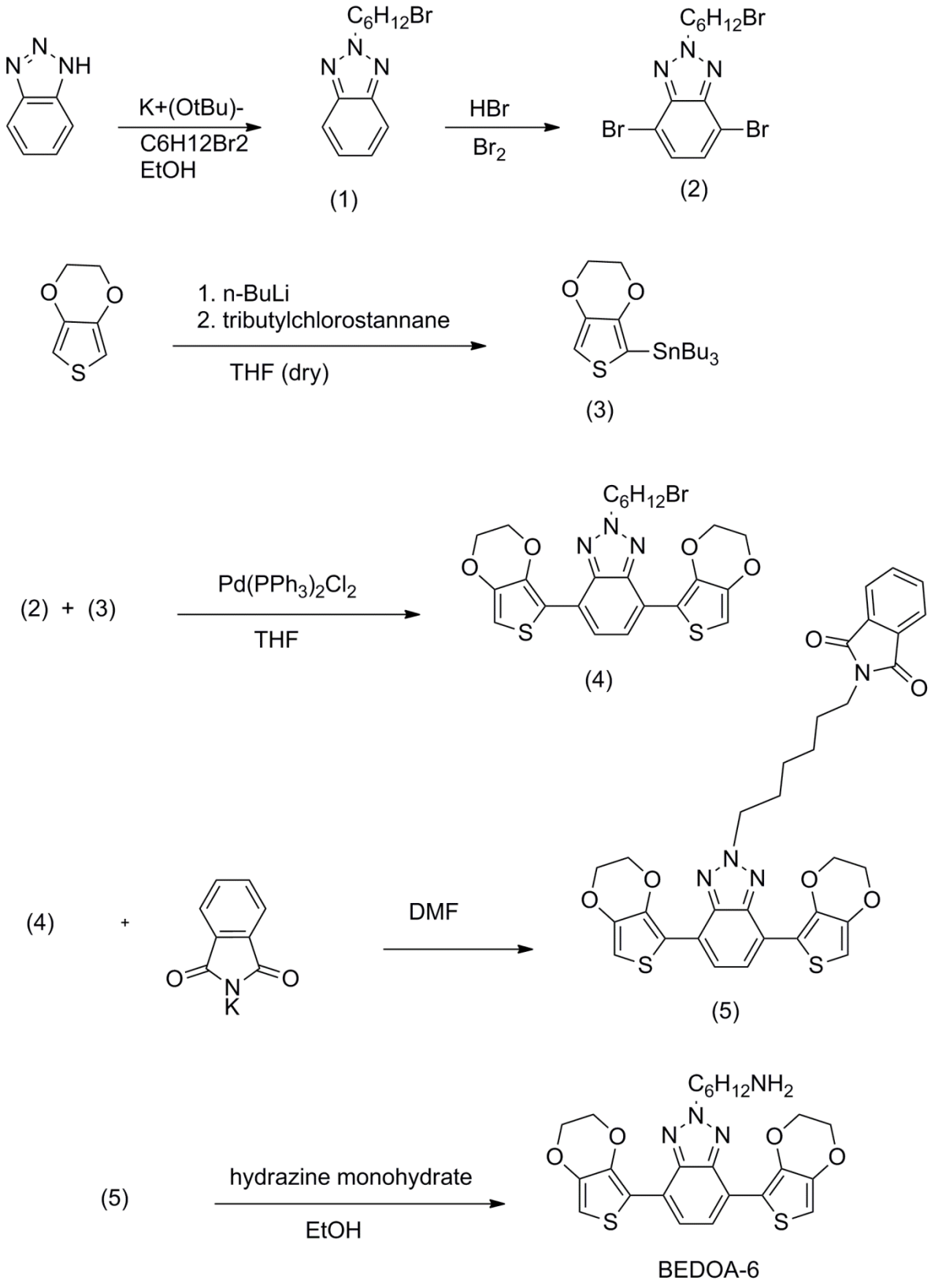
1. Synthetic pathway of the monomer BEDOA-6 (**Scheme S1)**.....2

2. Synthesis of urethane derivative of *N*-Boc-L-lysine (**Scheme S2)**……...3

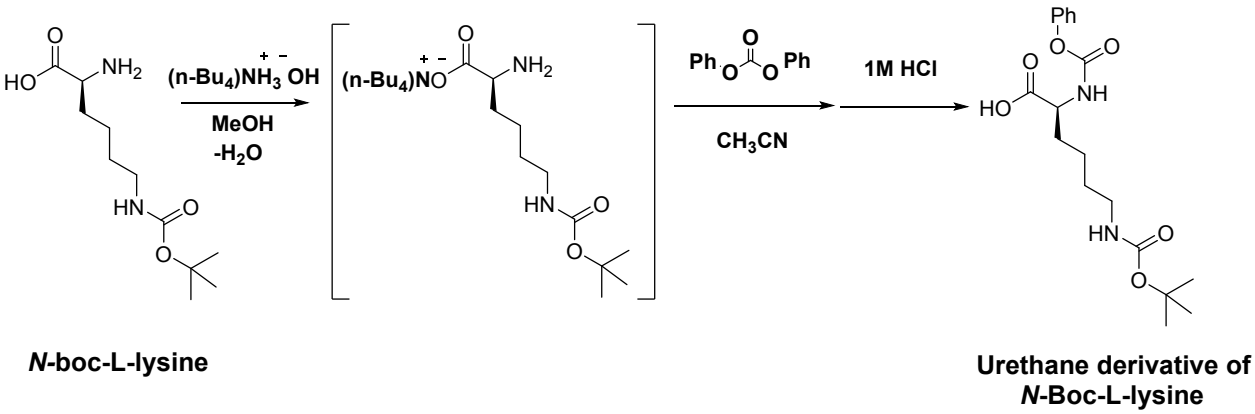
3. Synthetic route of the monomer TIFc (**Scheme S3)**.....4

4. ATR-FTIR spectra of (a) poly(TIFc) and (b) poly(TIFc-*co*-BEDOA-6-poly(L-Boc)) (**Figure S1**)……...5

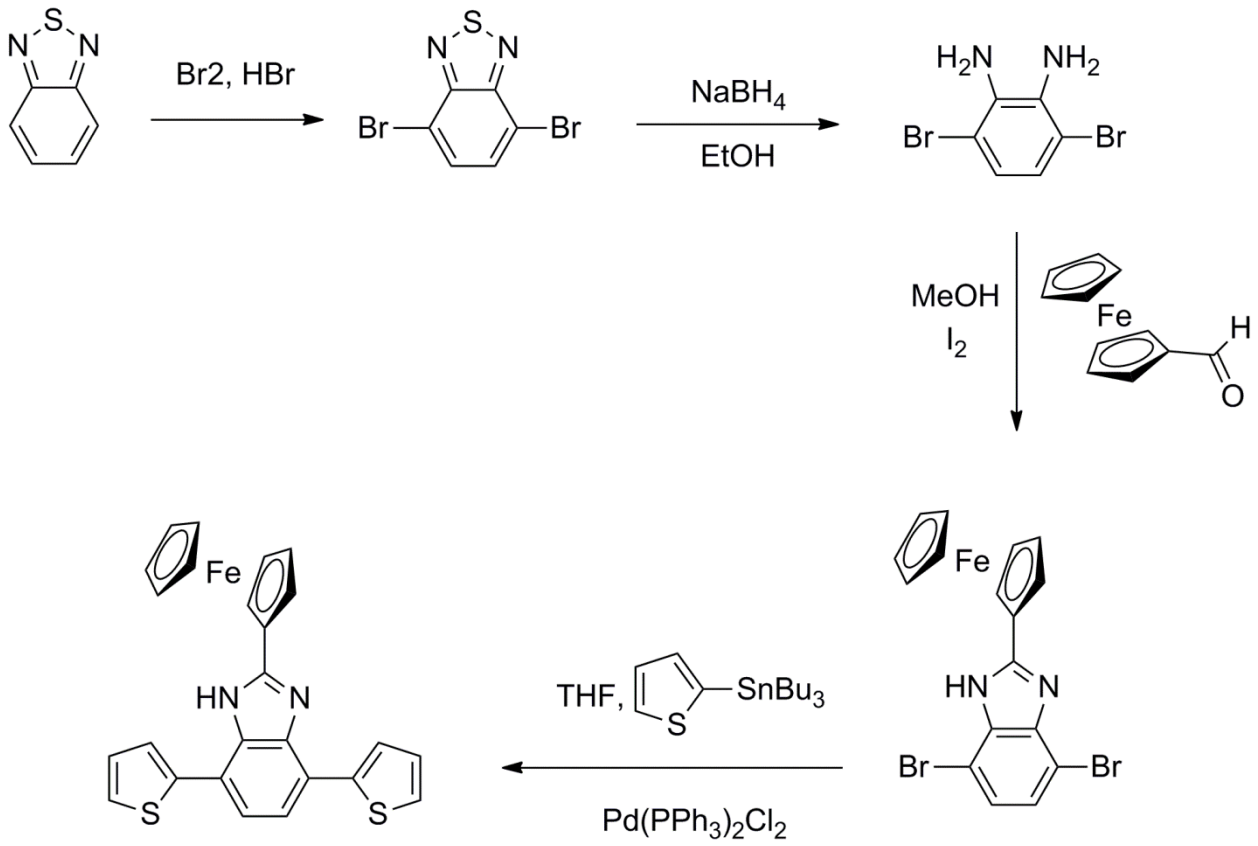
5. Typical Nyquist plots resulting from bare graphite electrode, poly(TIFc-co-BEDOA-6-poly(L-Boc)), and poly(TIFc-co-BEDOA -6-poly(L-Boc))/AOx in 5.0 mM $Fe(CN)_6^{3-/4-}$ containing 0.1 M KCl solution. (Curves in high frequency region given as inset) (**Figure S2**)……..…6



Scheme S1. Synthetic pathway of the monomer BEDOA-6



Scheme S2. Synthesis of urethane derivative of *N*-Boc-L-lysine.



Scheme S3. Synthetic route of the monomer TIFc.

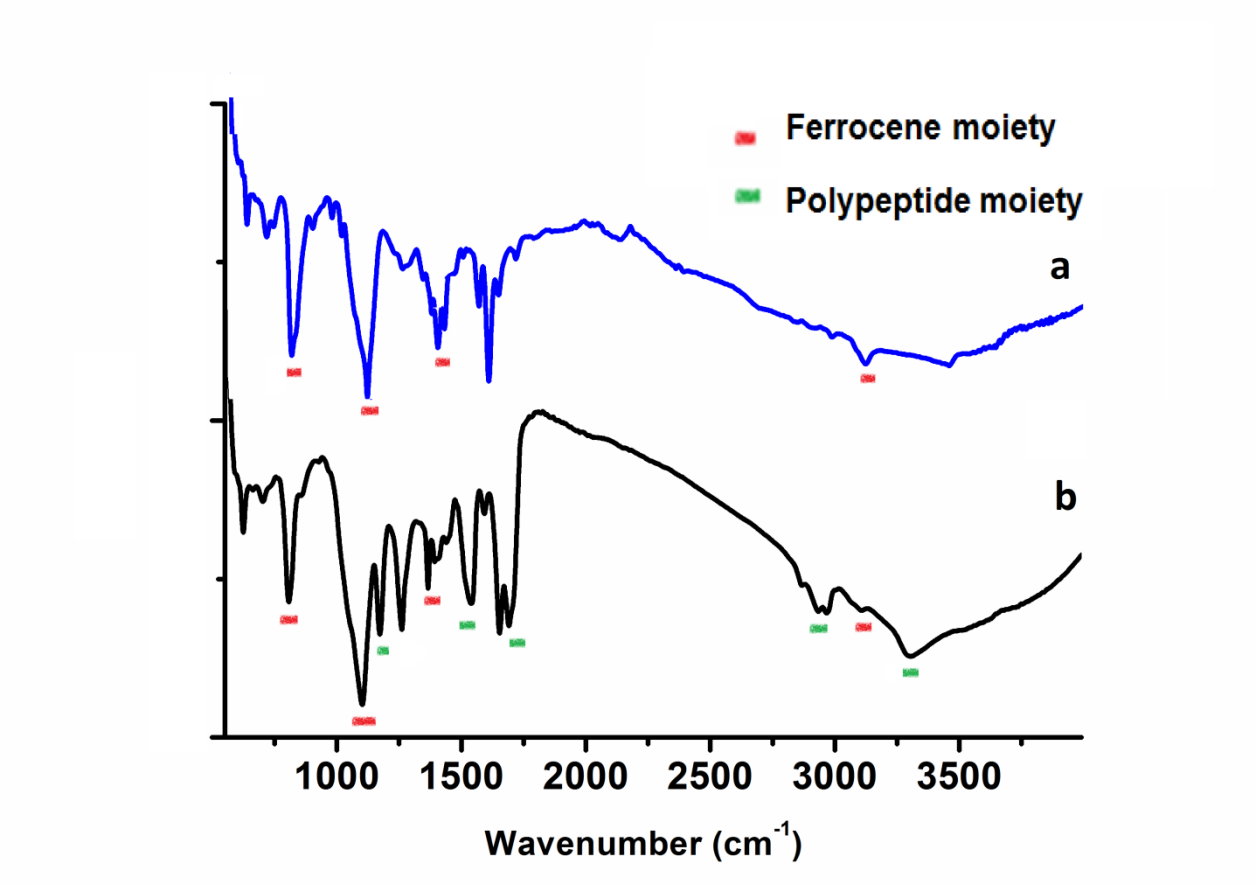


Figure S1. ATR-FTIR spectra of (a) poly(TIFc) and (b) poly(TIFc-*co*-BEDOA-6-poly(L-Boc)).

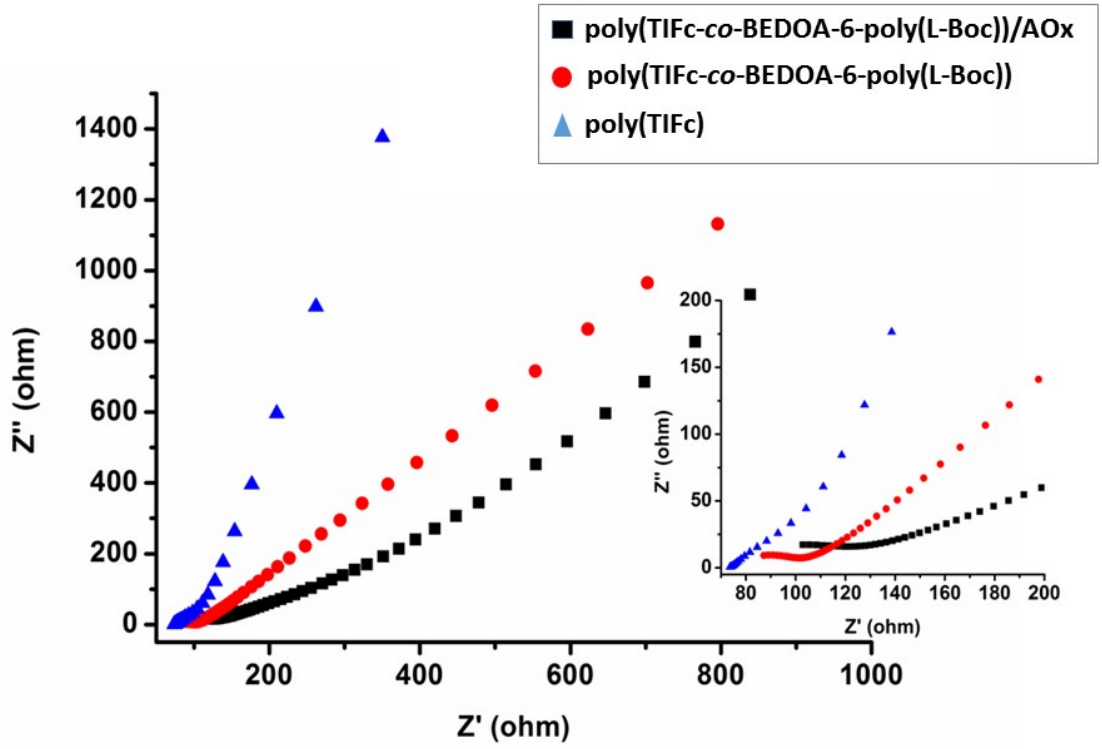


Figure S2. Typical Nyquist plots resulting from bare graphite electrode, poly(TIFc-co-BEDOA-6-poly(L-Boc)), and poly(TIFc-co-BEDOA-6-poly(L-Boc))/AOx in 5.0 mM $Fe(CN)_6^{3-/4-}$ containing 0.1 M KCl solution. (Curves in high frequency region given as inset).