

Supporting Information

Novel BODIPY-based Conjugated Polymers Donors for Organic Photovoltaic Applications

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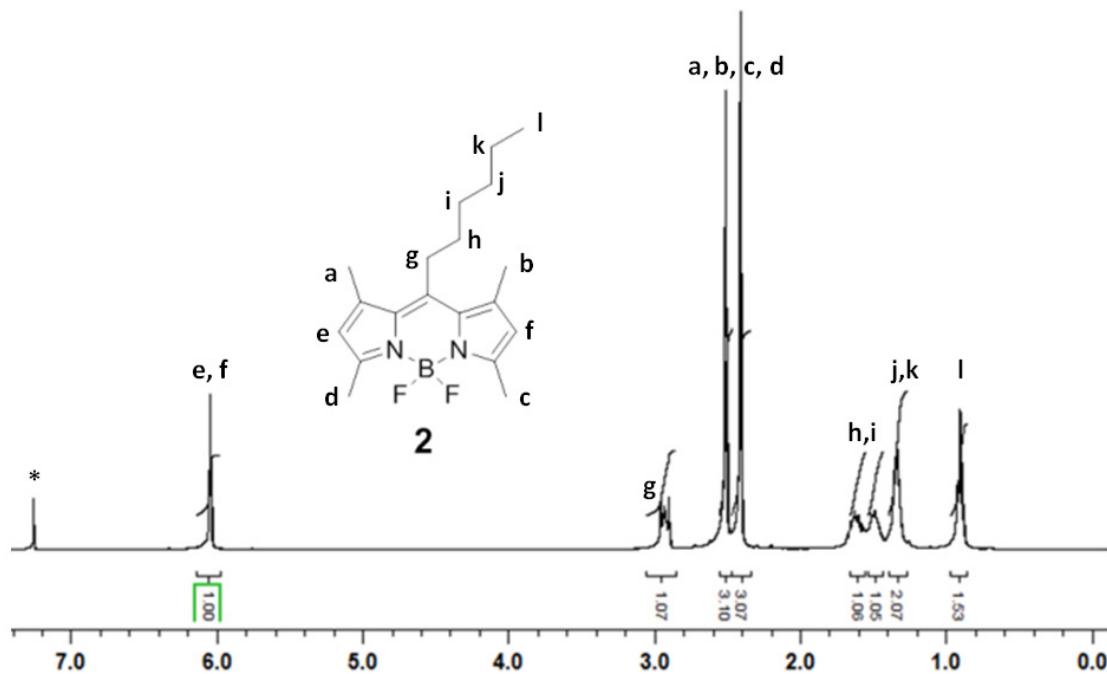
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20 Figure S1. ¹H-NMR spectrum of 5,5-difluoro-10-hexyl-1,3,7,9-tetramethyl-5*H*-dipyrrolo[1,2-*c*:2',1'-*f*][1,3,2]diazaborinin-4-iium-5-uide (2) in CDCl₃

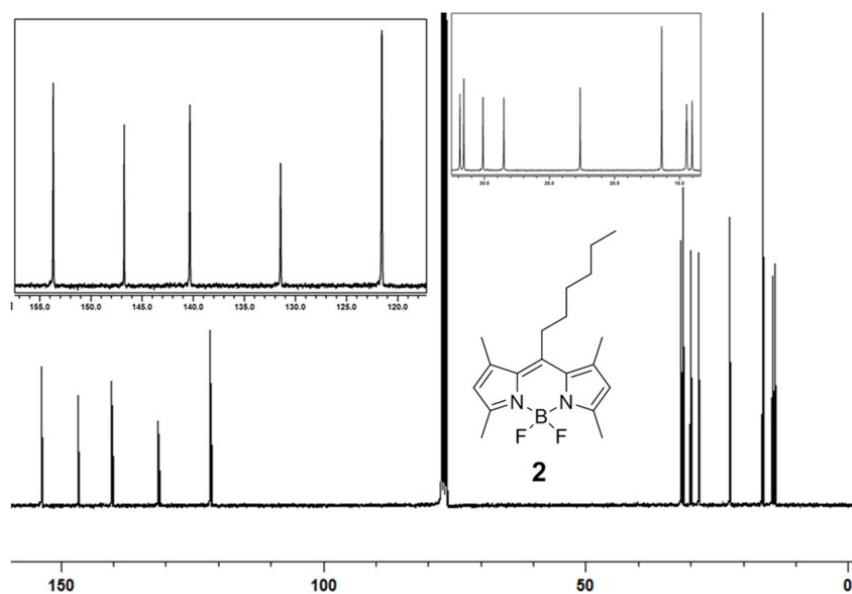


Figure S2. ¹³C-NMR spectrum of 5,5-difluoro-10-hexyl-1,3,7,9-tetramethyl-5*H*-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborolinin-4-iium-5-uide (**2**) in CDCl₃

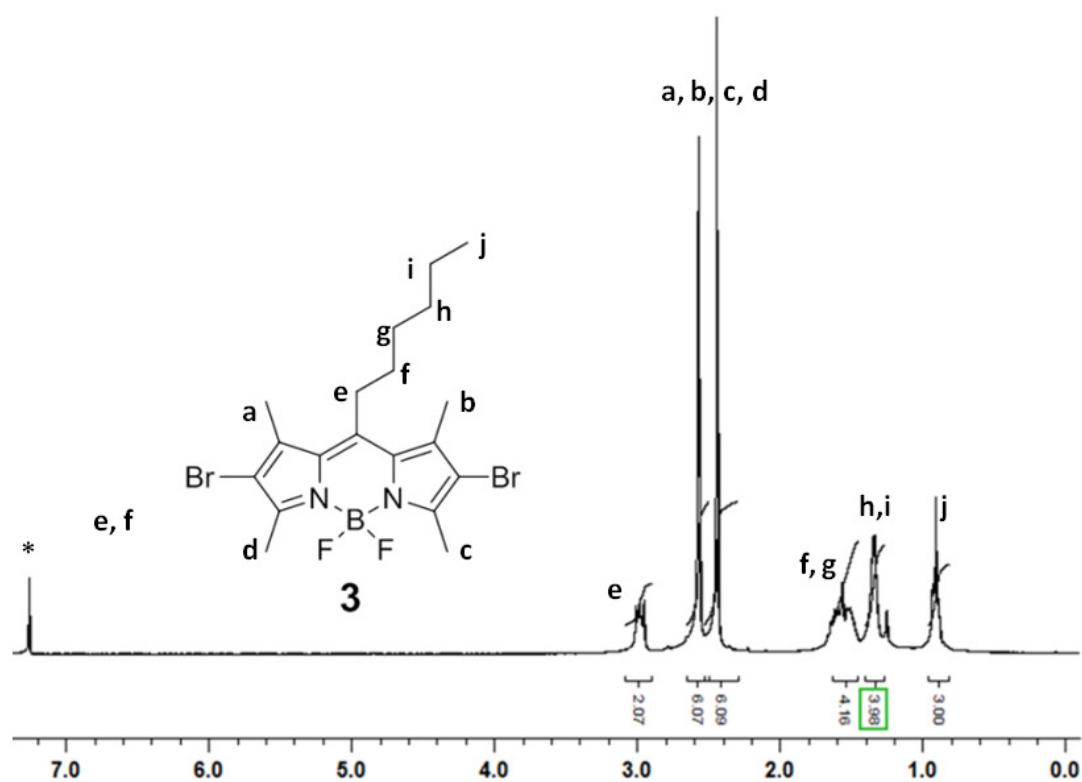


Figure S3. ¹H-NMR spectrum of 2,8-dibromo-5,5-difluoro-10-hexyl-1,3,7,9-tetramethyl-5*H*-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborolinin-4-iium-5-uide (**3**) in CDCl₃

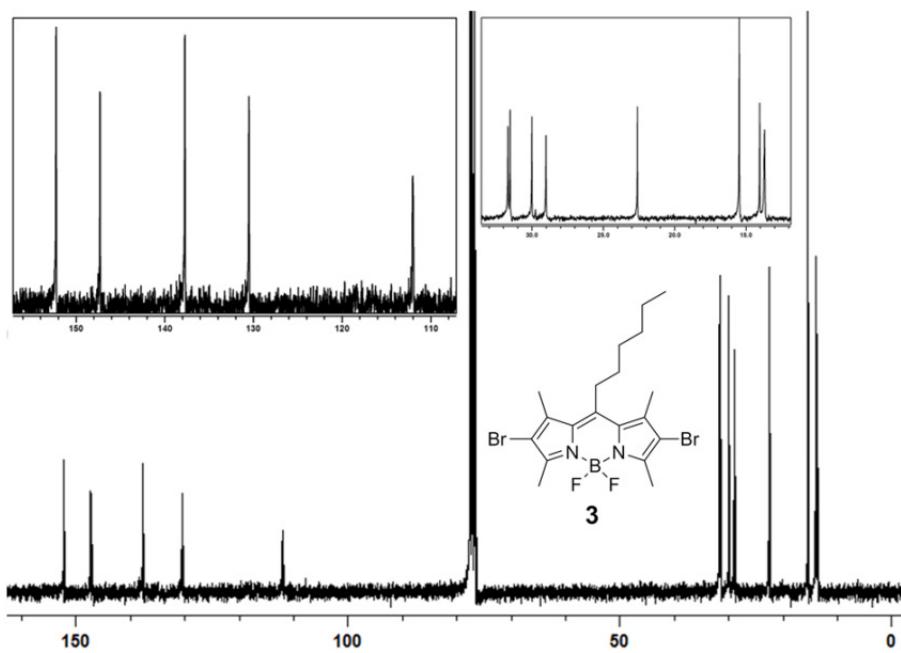


Figure S4. ¹³C-NMR spectrum of 2,8-dibromo-5,5-difluoro-10-hexyl-1,3,7,9-tetramethyl-5*H*-dipyrro[1,2-*c*:2',1'-*f*][1,3,2]diazaborinin-4-i um-5-uide (**3**) in CDCl₃

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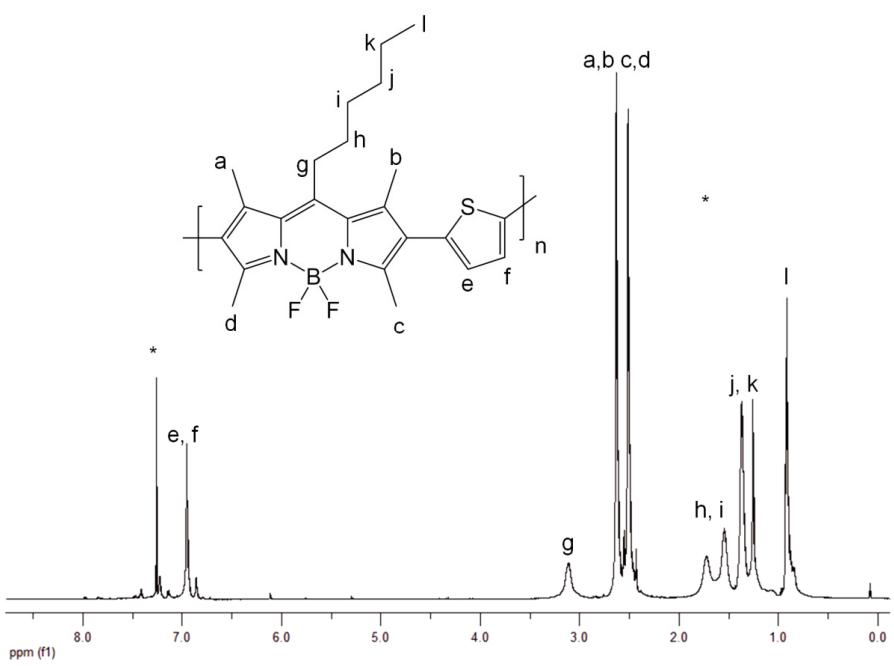


Figure S5. ¹H-NMR spectra of PBT.

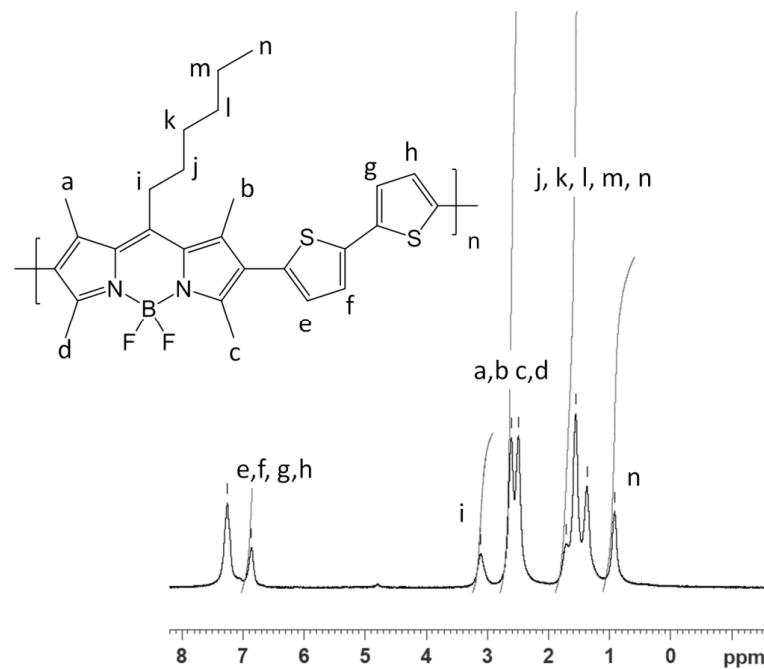
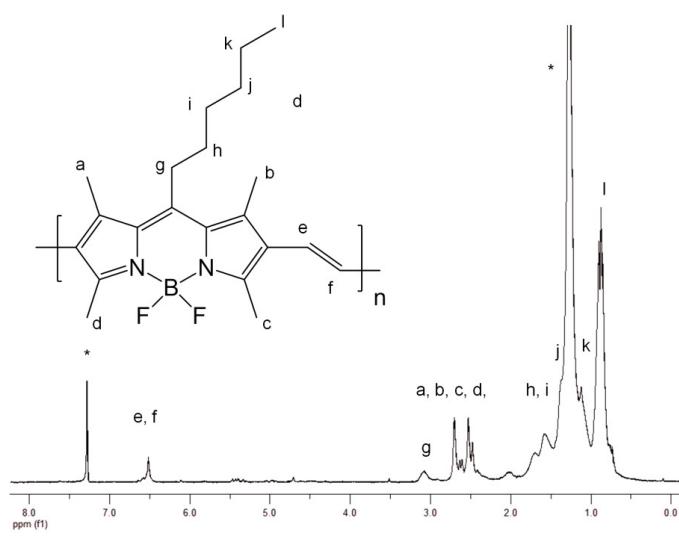


Figure S6. ^1H -NMR spectrum of **PBTT**.



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Figure S7. ^1H -NMR spectra of **PBE**.

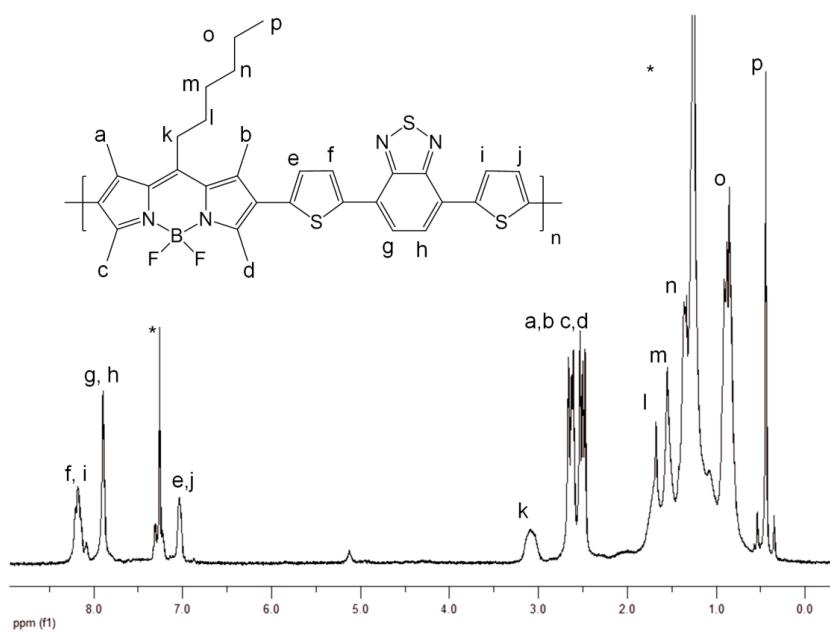


Figure S8. ¹H-NMR spectra of PBTBT.

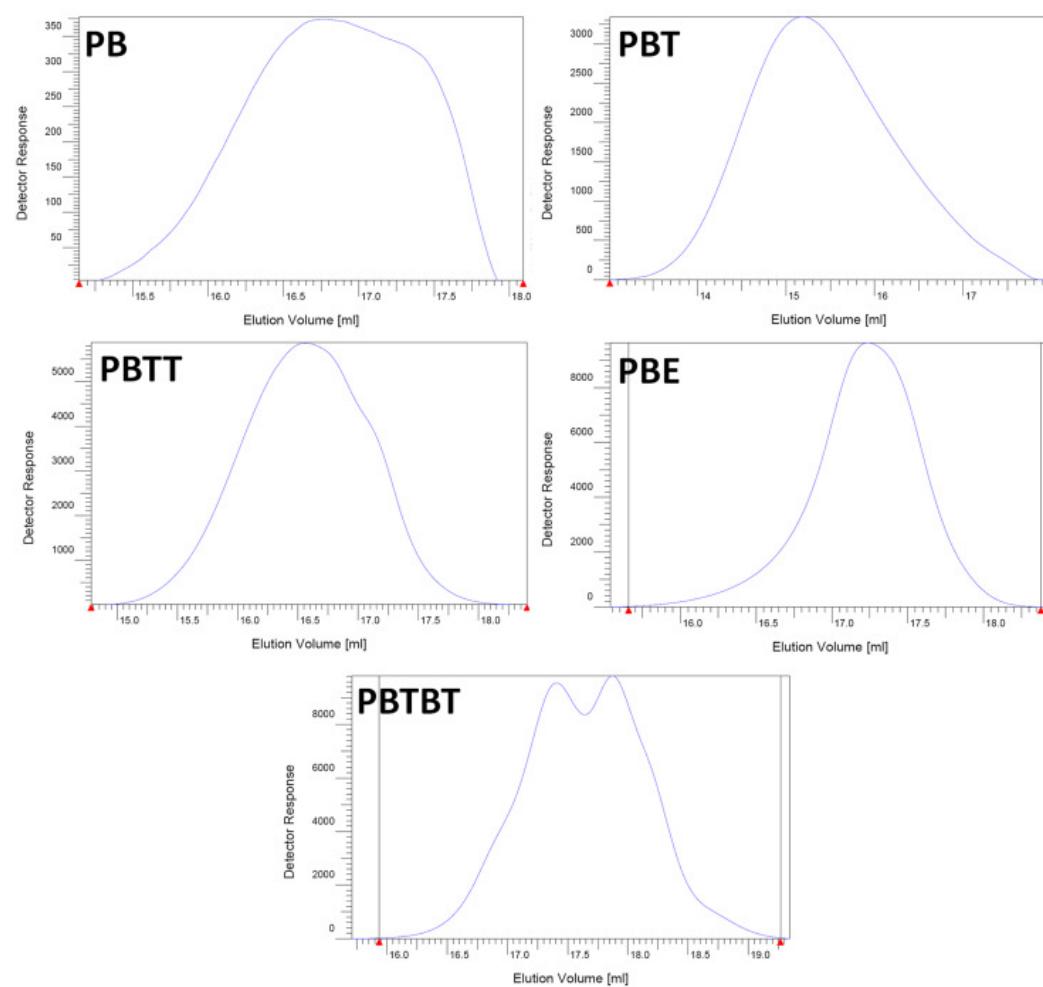


Figure 9. Typical gel permeation chromatographs of all synthesized polymers.

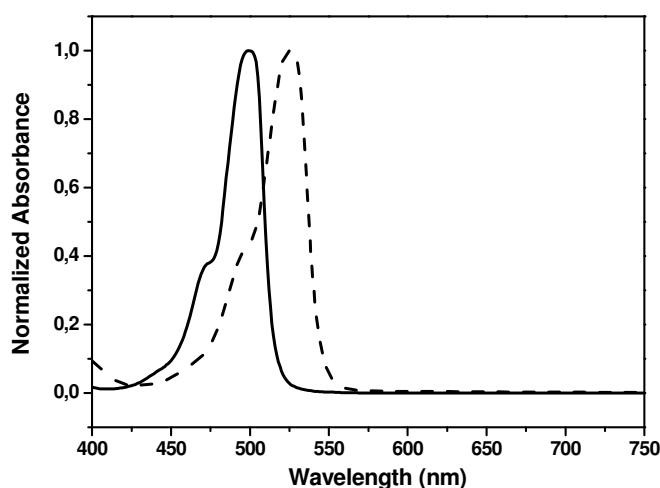
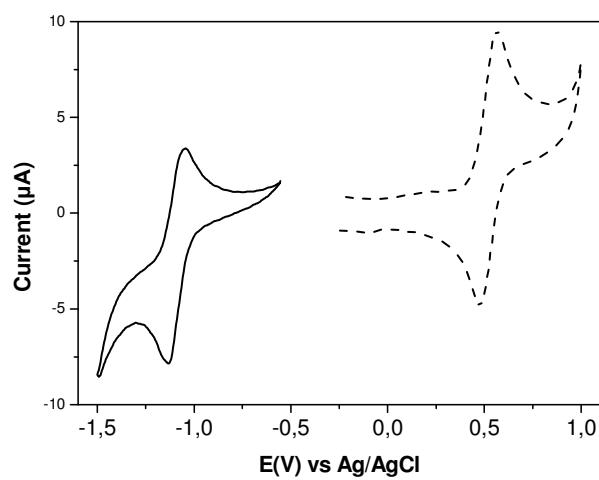
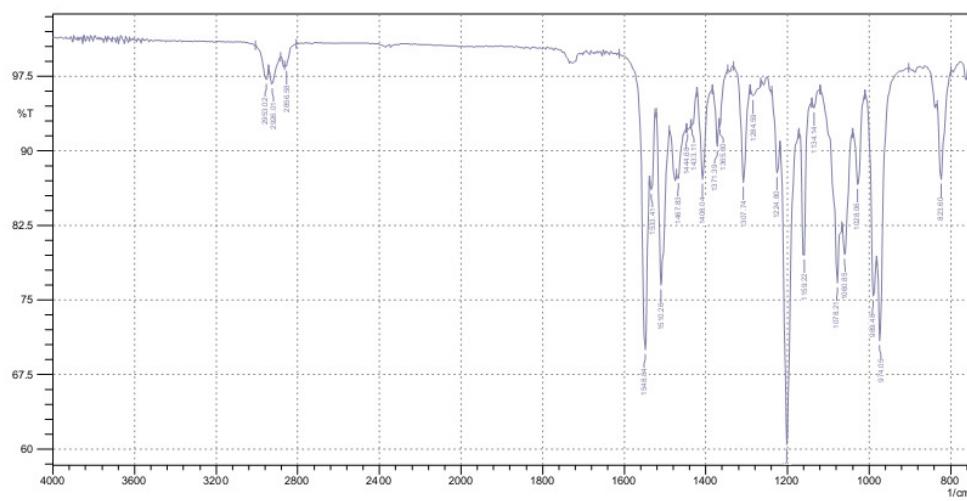


Figure S10. UV-Vis absorption in solution (CHCl_3) of compound **2** (solid line) and compound **3** (dashed line)



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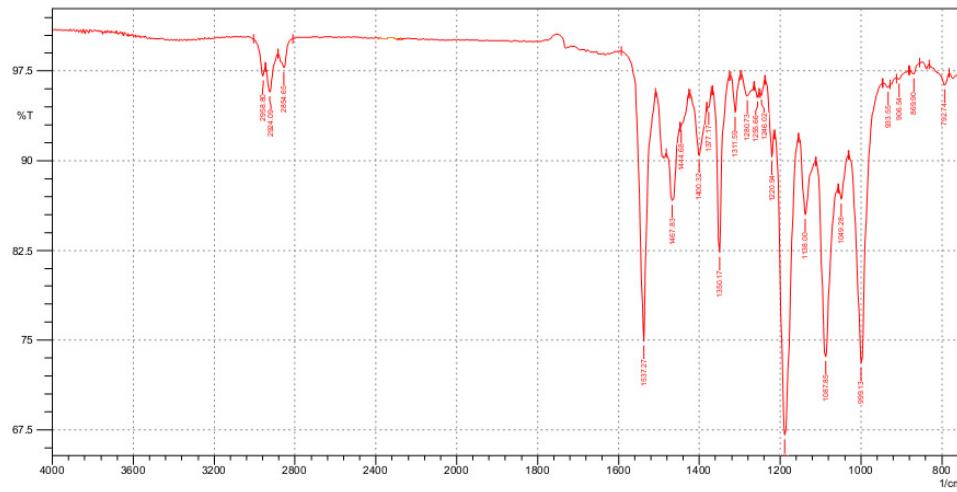
Figure S11. Cyclic Voltammograms (0.1 M TBAPF₆ in DCM) of thiophene-benzothiazole-thiophene moiety (solid line) and ferrocene (dashed line). Scan rate 100 mV/s



5,5-Difluoro-10-hexyl-1,3,7,9-tetramethyl-5H-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborinin-4-iium-5-uide

Figure S12. FT-IR spectrum of 5,5-difluoro-10-hexyl-1,3,7,9-tetramethyl-5H-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborinin-4-iium-5-uide (**2**).

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2,8-Dibromo-5,5-difluoro-10-hexyl-1,3,7,9-tetramethyl-5H-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborinin-4-iium-5-uide

Figure S13. FT-IR spectrum of 2,8-dibromo-5,5-difluoro-10-hexyl-1,3,7,9-tetramethyl-5H-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborinin-4-iium-5-uide (**3**).

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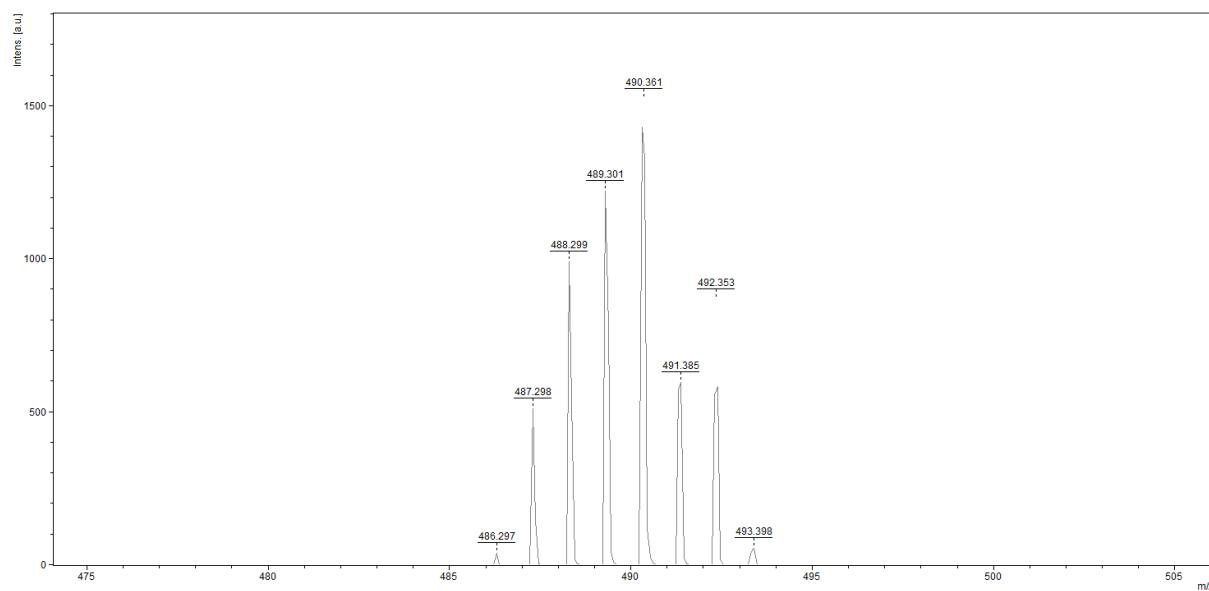


Figure S14. Maldi spectrum of 2,8-dibromo-5,5-difluoro-10-hexyl-1,3,7,9-tetramethyl-5*H*-dipyrrolo[1,2-*c*:2',1'-*f*][1,3,2]diazaborinin-4-ium-5-uide (**3**).

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