**The side chain effects on TPD-based copolymers: the linear chain leads to a higher *J*sc**

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Table S1 Photovoltaic parameters of PT1 and PT2-based polymer solar cells in an inverted device.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| polymer | *V*oc (V) | *J*sc  (mA/cm2) | *FF* | PCE (%) |
| PT1 | 0.86 | 7.03 | 0.46 | 2.75 |
| PT2 | 0.91 | 3.93 | 0.51 | 1.83 |

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Figure S1 *J*–*V* characteristics of PT1 and PT2 with an inverted device configuration of ITO/ZnO/Polymer:PC71BM/MoO3/Al.

Figure S2.1H NMR spectra of PT1 and PT2.

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