

**Supporting Information**

Synthesis of Four- and Six-Armed Star-Shaped Polycarbonates by *Immortal*

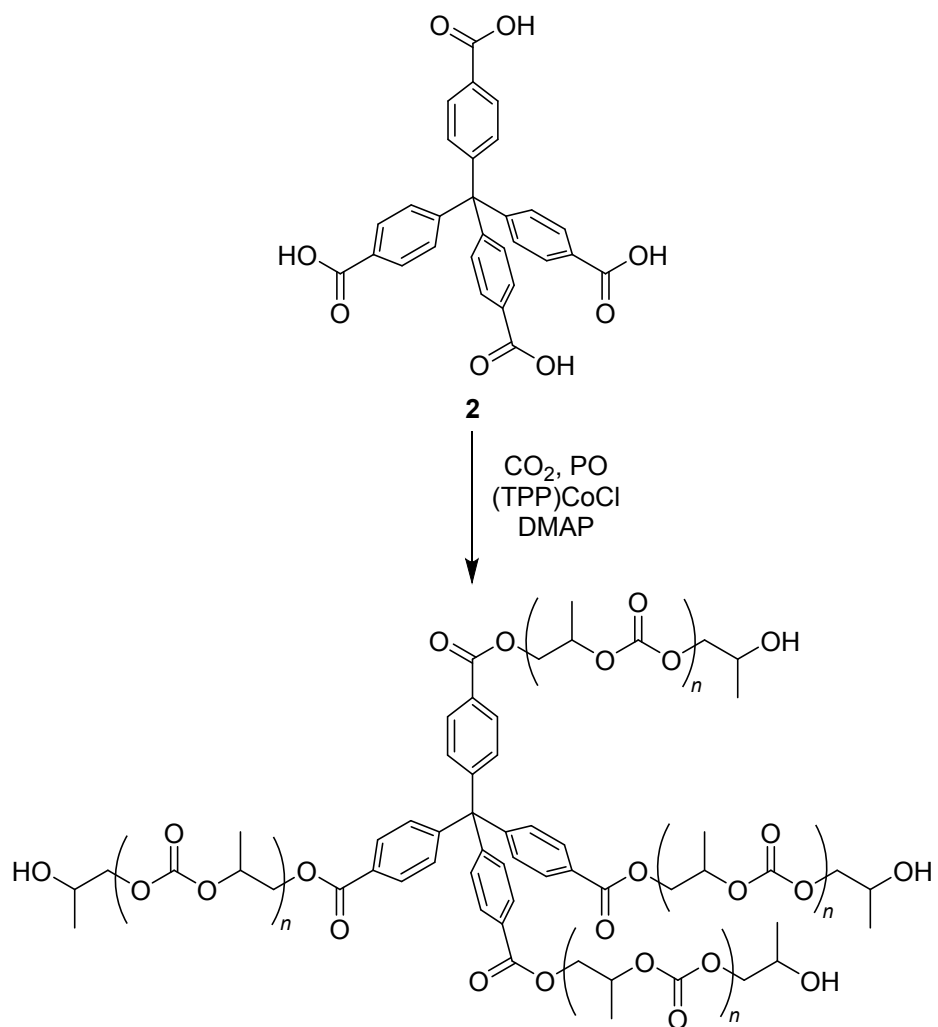
Alternating Copolymerization of CO<sub>2</sub> and Propylene Oxide.

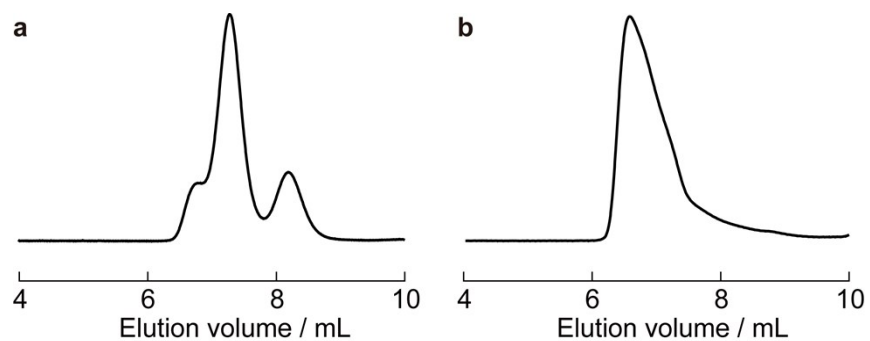
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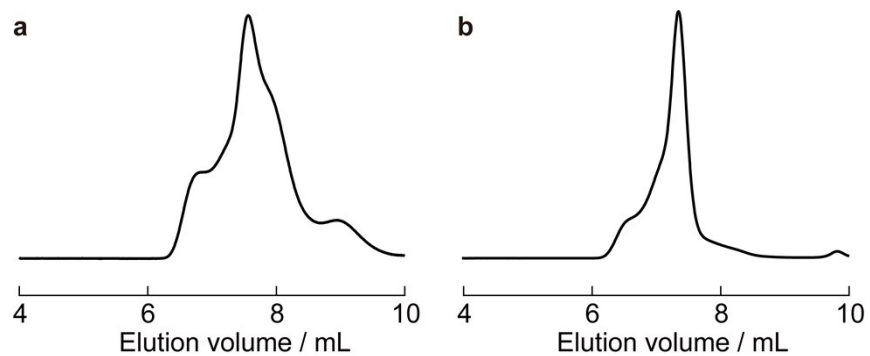
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**Scheme S1.** Synthesis of four-armed star PPC initiated from **2**.



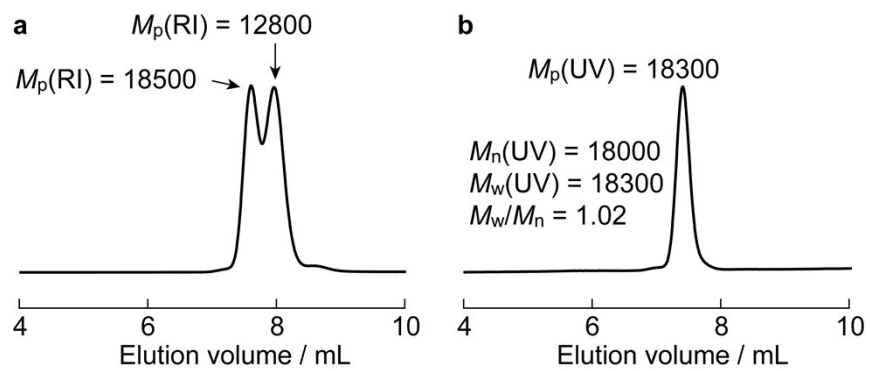
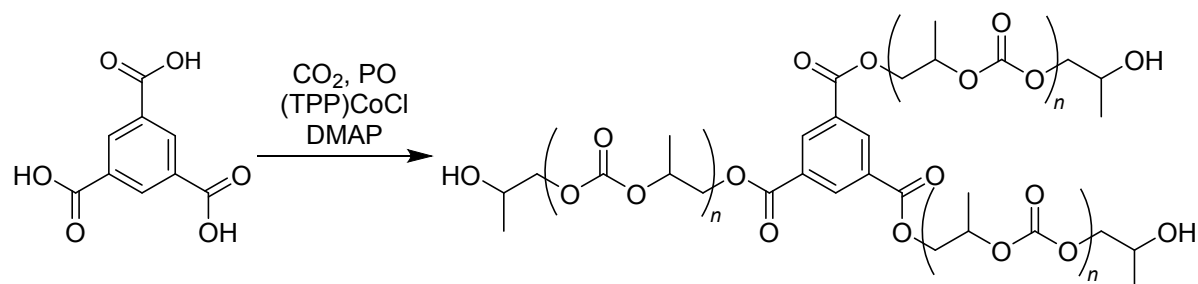


**Figure S1.** GPC chromatograms of the copolymerized product initiated from **2** (Table 1, entry 3) analyzed using RI (a) and UV (b) detectors.



**Figure S2.** GPC chromatograms of the copolymerized product initiated from **3** (Table 1, entry 4) analyzed using RI (a) and UV (b) detectors.

**Scheme S2.** CO<sub>2</sub>-PO alternating copolymerization initiated from trimesic acid.



**Figure S3.** GPC chromatograms of the copolymerized product initiated from trimesic acid analyzed using RI (a) and UV (b) detectors.