

Supporting Information
for
**Perpendicular Alignment and Selective Swelling-Induced
Generation of Homopores of Polystyrene-*b*-poly
(2-vinylpyridine)-*b*-poly (ethylene oxide) Triblock Terpolymer**

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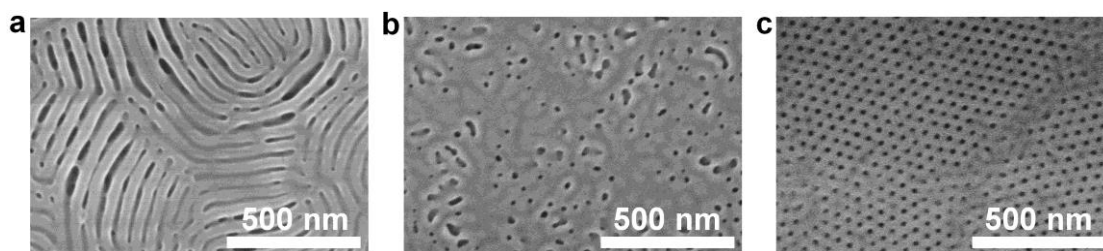


Figure S1. SEM surface images of the annealed SPO/PS films ($D=2.1$) subjected to ethanol swelling at 50 °C for 0.5 h. The volume fractions of PS are 68% (a), 72% (b) and 80% (c) by blending PS homopolymers in the films. Here, the ethanol swelling was mildly used to generate nanopores for evaluating the morphology changes of the annealed films.¹

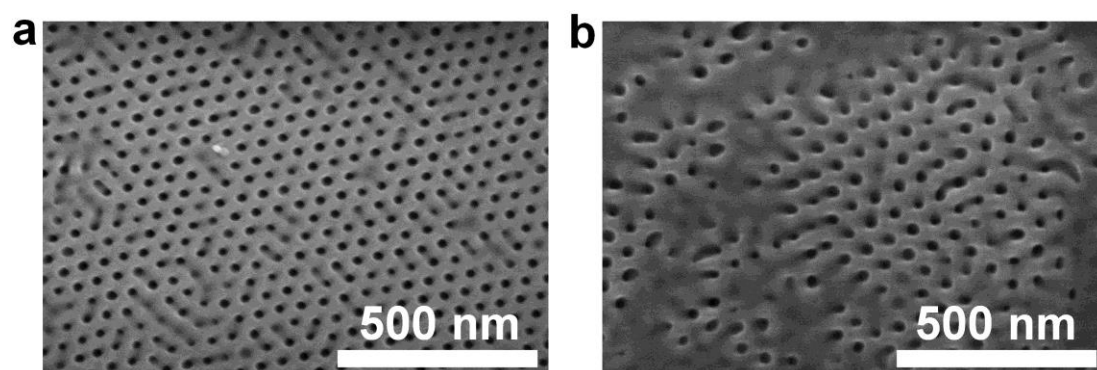


Figure S2. SEM surface images of the SPO/PS films annealed under a humidity of 70% (a) and 80% (b) at 25 °C followed by ethanol swelling at 50 °C for 0.5 h.

References

(1)Wang, Y. Nondestructive Creation of Ordered Nanopores by Selective Swelling of Block Copolymers: Toward Homoporous Membranes. *Acc. Chem. Res.* **2016**, 49, 1401-1408.