Electronic Supplementary Information:

For

Swelling-induced Mesoporous Block Copolymer Membranes with Intrinsically Active Surfaces for Size-selective Separation

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Figure S1

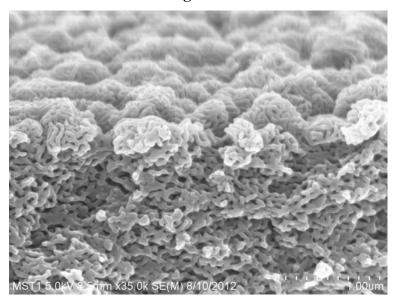


Figure S1. The 45°-tilted SEM image of the composite membrane showing both the surface and the cross section, demonstrating the interconnected mesopores in the PS-*b*-P2VP coating layer prepared at 15 h ethanol swelling.

Figure S2

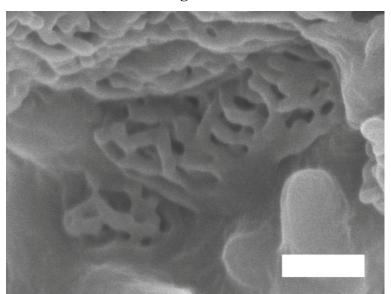


Figure S2. The SEM image of a PVDF macropore near the interface between the PVDF substrate and the coated BCP layer, which was filled with mesoporous PS-*b*-P2VP. The scale bar corresponds to 500 nm.

Figure S3

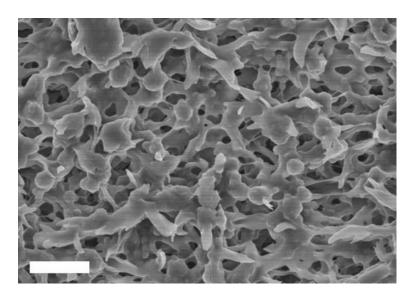


Figure S3. The surface SEM image of the macroporous PVDF supporting membrane. The scale bar corresponds to 2 μm .

Figure S4

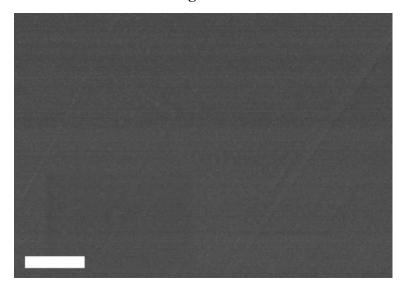


Figure S4. The surface SEM image of the as-coated PS-*b*-P2VP film before swelling, showing its nonporous nature. The scale bar corresponds to 200 nm.