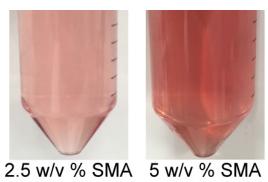
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# **Supplemental Information**

Applicability of Styrene-Maleic Acid Copolymer for Two Microbial Rhodopsins, RxR and *Hs*SRI

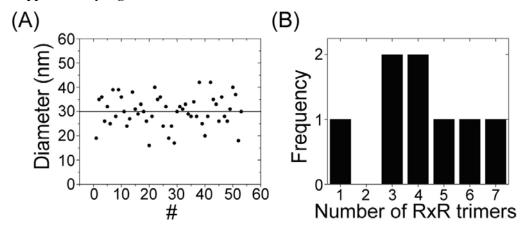
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### Supplementary Fig. S1



**Solubilization of** *E. coli* **cell membranes producing RxR with 2.5 w/v % and 5 w/v % SMA** Supernatant and precipitation after the ultracentrifugation of the suspension of the membranes solubilized with 2.5 w/v % SMA (left panel) or 5 w/v % SMA (right panel).

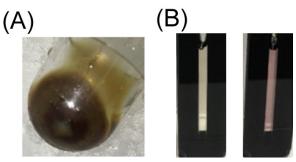
#### Supplementary Fig. S2



Estimation of the diameters of each RxR-SMA particle and the number of RxR trimers per particle

(A) Diameters of each RxR-SMA particle estimated from the AFM images (n = 53). (B) Frequency of the number of RxR trimers per particle estimated from the AFM images (n = 8).

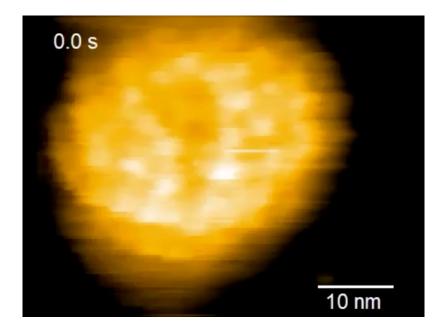
#### Supplementary Fig. S3



#### Extraction of HsSRI from E. coli membranes by DDM and by SMA

(A) *E. coli* cell membranes producing *Hs*SRI. (B) Sample cuvettes of extracted *Hs*SRI using DDM (*Hs*SRI-DDM) (left panel) and SMA (*Hs*SRI-SMA) (right panel) in buffer (500 mM NaCl, 50 mM Tris-HCl (pH 8.5), 10 v/v % glycerol).

## Supplementary movie S1



A representative HS-AFM movie of RxR-SMA

HS-AFM movie of RxR-SMA on the mica surface with 3.3 fps.