Supplementary information:

Co-Translational Insertion of Aquaporins into Liposome for Functional Analysis via an *E. coli* Based Cell-Free Protein Synthesis System

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Solubilization of liposome via detergents

Titration experiments were performed for liposomes prepared from L-α-Phosphatidylcholine using β-OG (20%) and TritonX-100 (5%). Optical density at 436 nm was used for lipid-detergent interaction determination according to previously reported [1].

Titration of OG and TX-100 was performed by adding β-OG (20%) or TX-100 (5%) solutions to 200 µL suspension of liposome (4 mg/mL in Assay buffer A) in increments of 2 µL. OD_{436nm} was measured immediately after each step. Titration curves were generated by plotting detergent-to-lipid ratios against corresponding OD_{436nm}. Detergent working concentration was chosen as the point at which liposomes were completely solubilized and OD_{436nm} reduced to almost zero. Titration curves were shown in Figure S1.

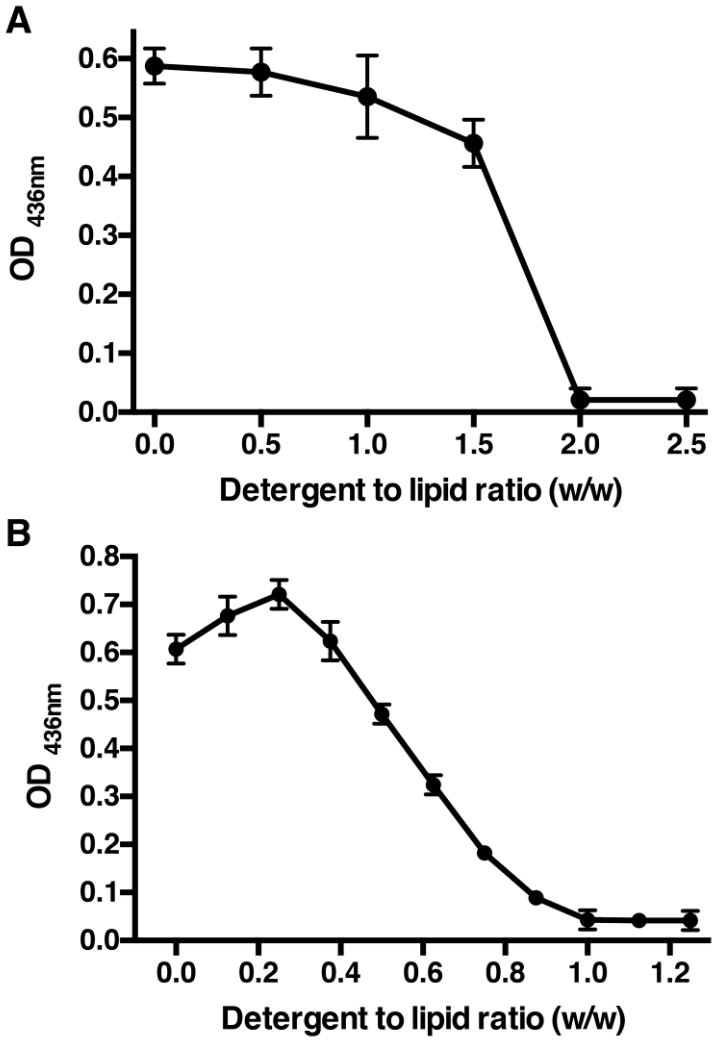

Figure S1. Titration of liposome with detergents. A, titration with β-OG B, titration with TritonX-100.

Reference:

1. Matsuzaki, K.; Murase, O.; Sugishita, K.; Yoneyama, S.; Akada, K.; Ueha, M.; Nakamura, A.; Kobayashi, S. Optical characterization of liposomes by right angle light scattering and turbidity measurement. *Biochim. Biophys. Acta* **2000**, *1467*, 219-226.