

Supplementary Information

Effects of lipid membrane composition on the distribution of biocidal guanidine oligomer with solid supported lipid membranes

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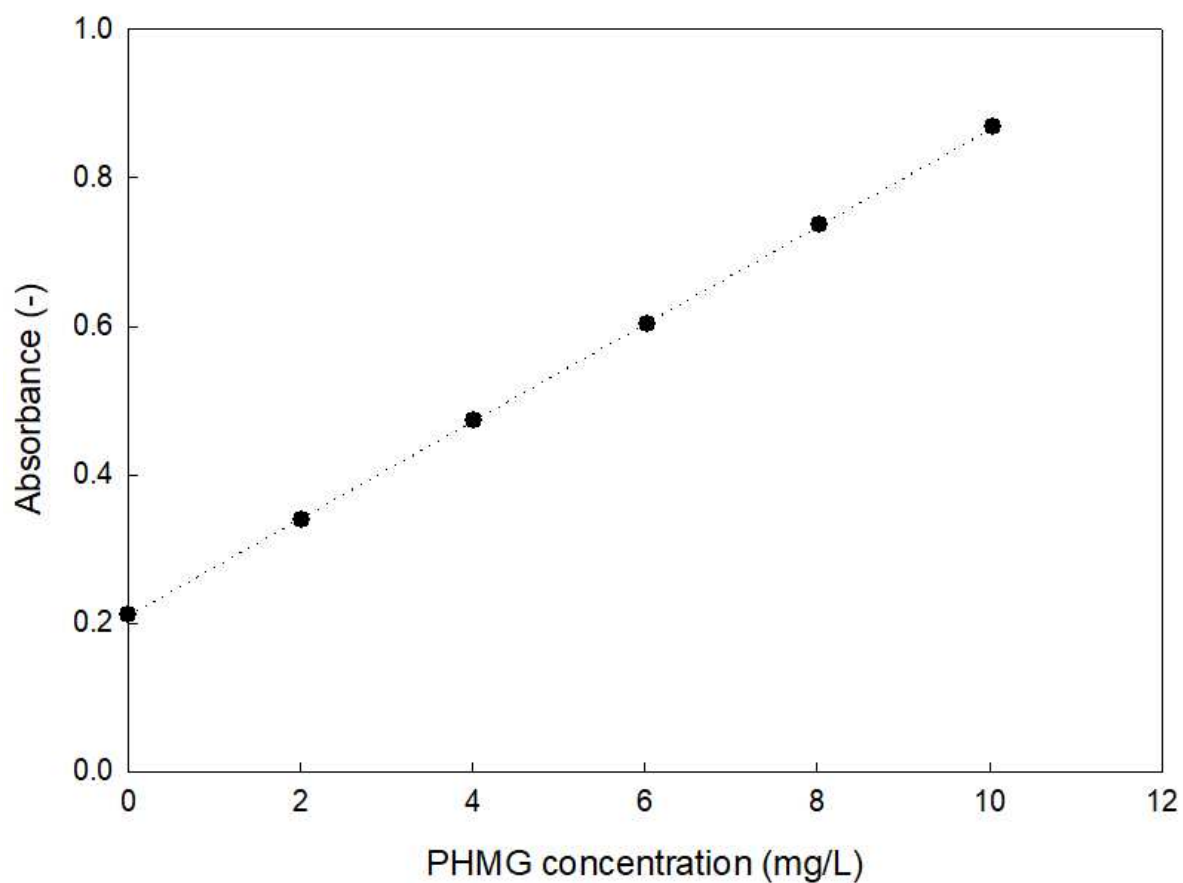


Figure S1. The visible light absorbance at 549 nm of mixtures of PHMG aqueous solution, pH 3.6 glycine buffer, and 0.05 % eosin Y solution (volume ratio of PHMG: glycine buffer: eosin Y solution = 1: 1: 0.2). The 549 nm absorbance is proportional to PHMG concentration in the range of 0 -10 mg/L (the dotted line represents the linear regression with $r^2 = 1$).

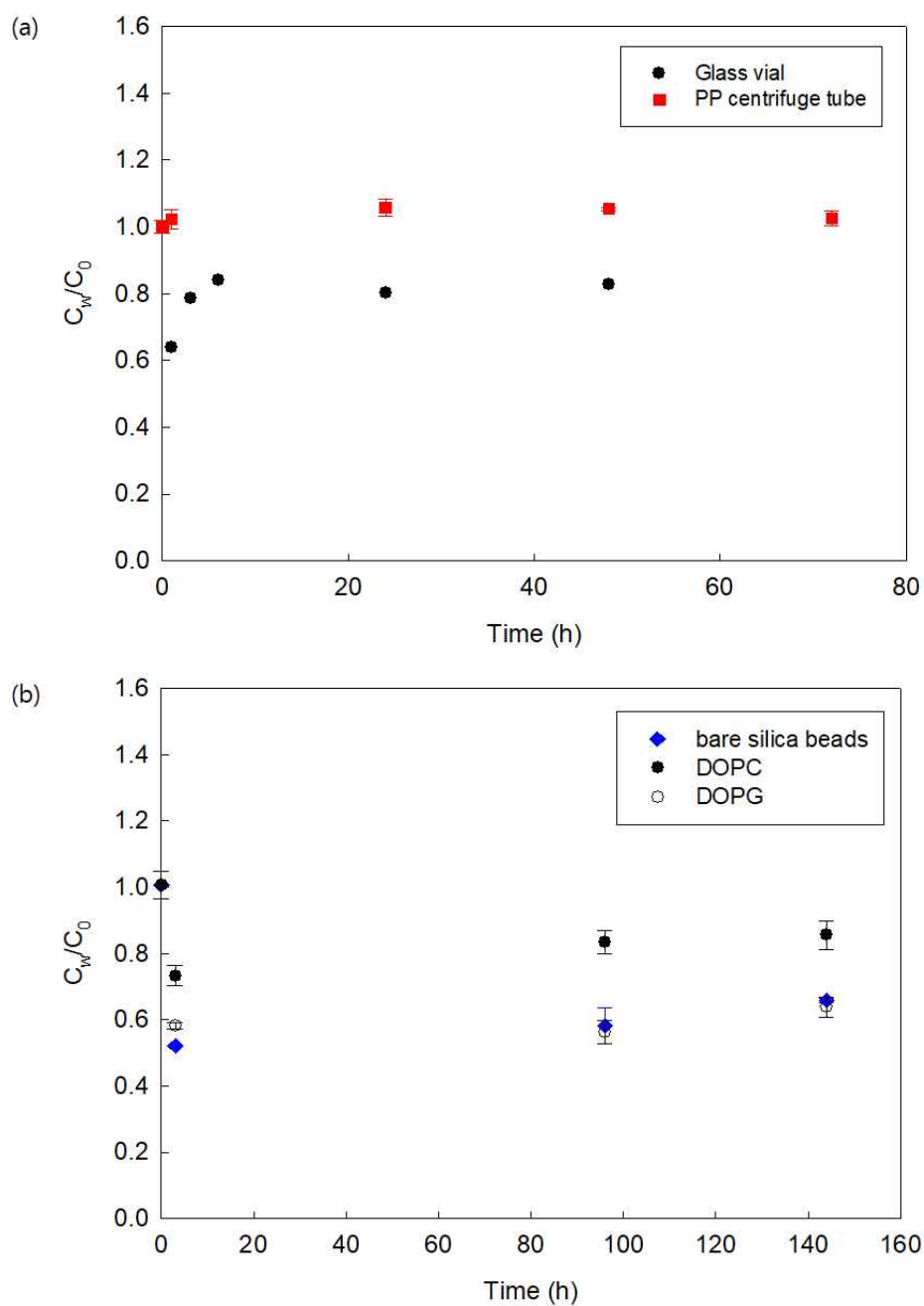


Figure S2. (a) Concentration changes of PHMG shaking inside glass vials and polypropylene (PP) centrifuge tubes (b) Interaction of PHMG with bare silica beads and solid supported lipid membranes with DOPC (zwitterion head), and DOPG (negative head) inside glass vials. C_w and C_0 indicate free water concentration after settling solid supported lipid membranes and initial concentration, respectively. The error bars indicate standard deviations of triplicate analyses.

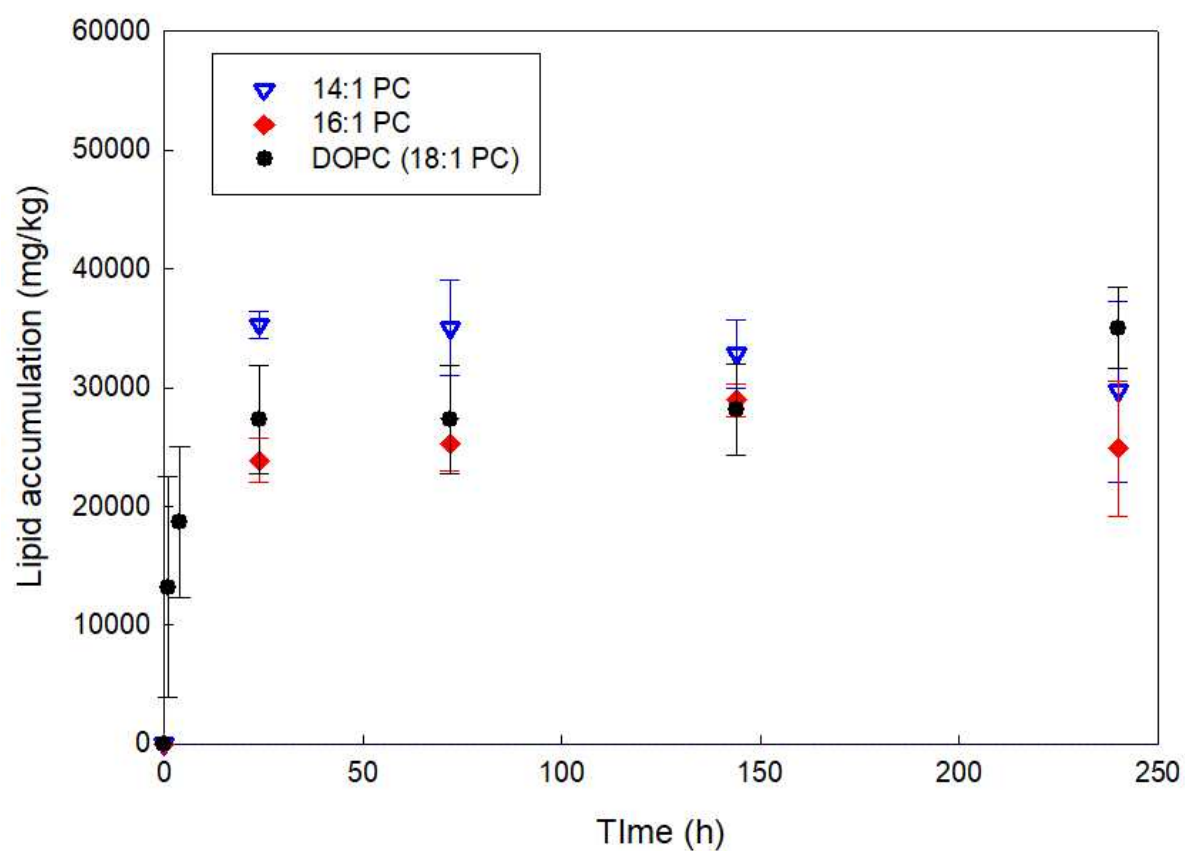


Figure S3. Lipid accumulation rates of PHMG ($C_0 = 5.0$ mg/L) using three different unsaturated lipid membranes with different acyl chain lengths. Error bars denote standard deviations of three analyses.