

**GLTP-fold Interaction with Planar Phosphatidylcholine Surfaces is Synergistically Stimulated by Phosphatidic Acid and Phosphatidylethanolamine\***

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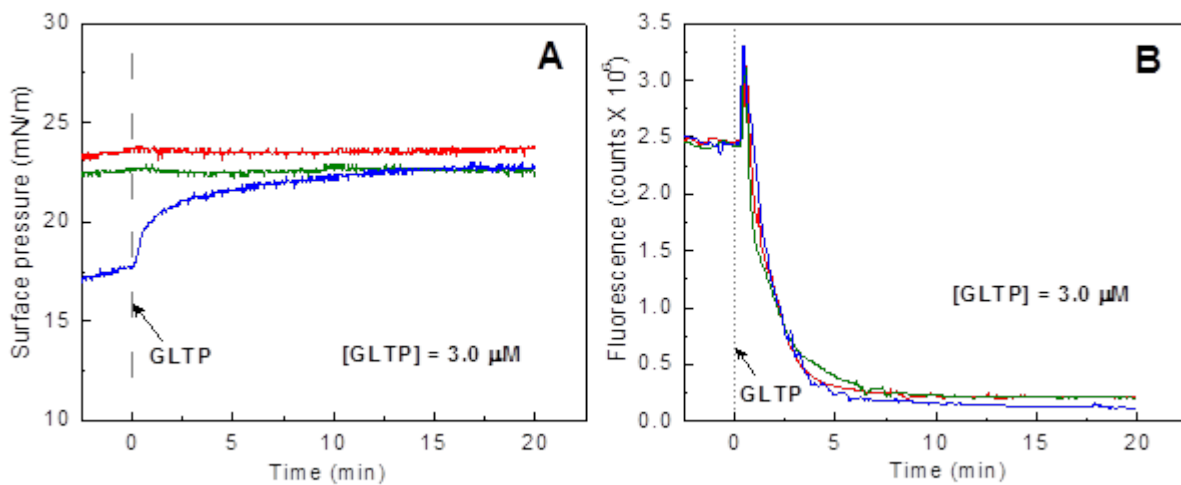
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**SUPPLEMENTAL INFORMATION & FIGURES**

## Supplementary Figure S1

**Figure 4 Supplement. Surface Pressure Regulates Glycolipid Removal Rate from the Monolayer in Phospholipid Composition–Dependent Manner.** The left panel shows the surface pressure change as a function of time when the monolayer matrix is POPE. The initial fixed surface pressures are 17, 22, and 24 mN/m. Right panel **B**) is the corresponding surface fluorescence response as a function of time for the different initial surface pressures in A). At sufficiently low initial surface pressure, GLTP penetrates into POPE resulting in pressure increase (blue trace).



## Supplementary Figure S2

**Figure 5 Supplement. Lipid Surface Density Calculations.** To estimate the B15-GalCer surface density in POPC or POPE, we relied on the surface pressure versus molecular area isotherms of POPC and POPE shown in **(A)** which agree well with our earlier measurements [e.g. Brockman et al., 2003, *Biophys. J.* 85: 2384-2396; Fig. 1A]. The area contribution (per molecule) of the 1 mole% B15-GalCer is similar in magnitude to that of POPC or POPE. **(B)** The impact of POPC and POPE surface density on the B15-GalCer uptake rate by GLTP. The surface densities for POPC and POPE shown in (B) were obtained by calculating the inverse values for their cross-sectional areas (area per molecule) that correspond to the surface pressures in Figures 4A and 4C.

