Compartmentalizing a lipid bilayer by tuning lateral stress in a physisorbed polymer-tethered membrane.

Amanda P. Siegel,\textsuperscript{a} Michael J. Murcia,\textsuperscript{a} Merrell Johnson,\textsuperscript{b} Michael Reif,\textsuperscript{c} Rainer Jordan,\textsuperscript{c,d} Jürgen Rühe,\textsuperscript{e} Christoph A. Naumann*\textsuperscript{a}

\textsuperscript{a}Department of Chemistry and Chemical Biology, Indiana University-Purdue University Indianapolis, Indianapolis, IN 46202-3274, USA.
\textsuperscript{b}Department of Physics, Indiana University-Purdue University Indianapolis, Indianapolis, IN 46202-3274, USA.
\textsuperscript{c}Technical University of Munich, Department of Macromolecular Chemistry, 85747 Garching bei München, Germany
\textsuperscript{d}Technical University of Dresden, Department of Chemistry, 01062 Dresden, Germany (current address).
\textsuperscript{e}University of Freiburg – IMTEK Department of Microsystems Engineering, Laboratory for Chemistry and Physics of Interfaces, Freiburg, Germany

Bilayers were doped with different lipid dyes, NBD-PE (which segregates into liquid-ordered domains) and TRITC-DHPE (which segregates into liquid-disordered domains). Bilayers showed the same characteristic diffusion barriers using either type of lipid dye. This is an indication that the dark lines are not a result of a separation into liquid-ordered and liquid-disordered phases, but instead indicate a different kind of barrier.
Figure S1. 15 mol% DODA-E₈₅ bilayers doped with different lipid dyes: NBD-DHPE (left – same as Fig. 2 b,e in main text) and TRITC-DHPE (right). As in Fig. 2 in the main text, the size for the top row of micrographs is 50 μm x 50 μm; the size for the bottom row which also show FRAP is 100 μm x 100 μm. The dotted circle indicates the position and size of the bleaching spot.