

Supplemental Figures

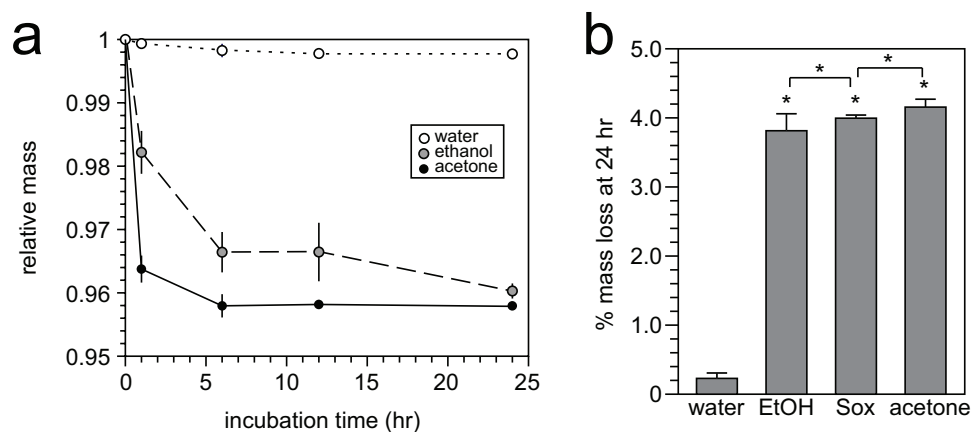


Figure 1: (a) Thin squares of PDMS were submerged in beakers containing either reaction grade water, ethanol, or acetone pre-heated to 37 °C. At the given times, chunks were removed, dried, and re-weighed. PDMS chunks ranged from 100 to 350 mg, and four chunks were placed in a beaker to give ~800 mg total PDMS. Beakers were filled with 200 ml of solvent, giving a PDMS:solvent ratio of ~4 mg/ml. All solvents followed a trend consistent with their PDMS solubility, and most extraction was completed by 6 hours (n=4 chunks/beaker, 2 independent experiments). (b) Mass loss at 24 hours in static beakers, except for Sox. “Sox” refers to overnight Soxhlet extraction in ethanol and represents the effects of an excess of solvent on the extent of extraction. Percent extractions at 24 hours were as follow: water, 0.229±0.08%; ethanol, 3.81±0.25%; ethanol in Soxhlet, 4.00±0.004%; acetone, 4.16±0.11%. Soxhlet extraction in a 500 ml apparatus, cycling approximately once per hour for at least 14 hours, achieved at least 35-fold higher solvent availability than 200 ml beakers. The result was more consistent extraction that was significantly different from and higher than that achieved by the beaker of ethanol (p<0.05), yet still significantly different from and lower than that achieved by the beaker of acetone (p<0.05).

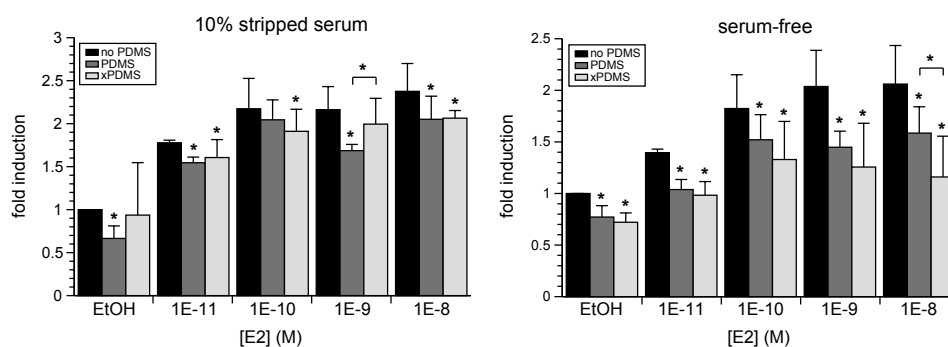


Figure 2: MCF-7 MVLN cells stably expressing luciferase showed graded responses to estrogen doses in 96-well plate culture. *Left*, Cells cultured in stripped serum in the presence of floating non-extracted PDMS (PDMS) or extracted PDMS (xPDMS) pieces responded less well to estrogen stimulation (n=3 experiments), though there was no consistent difference between extracted and non-extracted PDMS conditions. Significance was taken with respect to the no-PDMS control at each dose. *Right*, MCF-7 MVLN cells cultured in the absence of serum showed a clearer relationship between non-extracted and extracted PDMS in response to estrogen doses, with extracted PDMS demonstrating a slightly greater inhibitory effect that was consistent but only significantly higher than PDMS at the highest tested estrogen dose (n=3 experiments).