Materials

UV lamp (λ = 254 nm, P = 7 mW/m²) under a fume hood or linked with an ozone filter. (UVO Cleaner, Jelight).

Synthetic Quartz mask with features (Toppan / 4DCells / JD Photodata).

Glass coverslips 25 mm (or any size you wish to use). [My reference: Marienfeld 0111650]

PLL(20)-g[3.5]-PEG(2): poly-L-lysine-g-poly(ethyleneglycol). Keep a stock solution at 0.5 mg/mL in 10 mM Hepes pH 7.4 at +4°C. Use at 0.1 mg/mL in10 mM Hepes pH 7.4. The PLL-g-PEG is very stable and can be kept for months (Surface Solutions / Jemken). Note: when diluting the stock solution from 0.5 mg/mL to 0.1 mg/mL:

Prepare a small volume that can be used in the coming weeks.

Filter it with a 0.2 µm sterile filter (to remove potentially big impurities from the solution, which would affect the passivation homogeneity). [Filter spec. : 0.2 µm, sterile, non-pyrogenic, hydrophilic (Clearline 146560)].

Fibronectin from bovine plasma. Aliquoted in 25 µL at 1 mg/mL aliquots stored at-20°C. Once diluted, it is stored at +4°C. Reference F1141 (Sigma-Aldrich).

Fibrinogen-{Alexa488 (green), Alexa594 (red), Alexa647 (far-red)} (Invitrogen) at 1.5mg/mL in NaHCO3 buffer (100mM, pH 8.3, powder from Sigma Aldricht ref. S-6297).

For chamber manufacturing (optional) :

Aquarium glue (Zolux Silicone SA 500).

35mm petri dishes.

Epilog engraver laser cutter (accessible in the PMMH lab by Joseph).