Electronic Supplementary Material (ESI) for Analyst

Photonic Crystal Enhanced Microscopy for Imaging of Live Cell Adhesion

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Electronic supplementary information

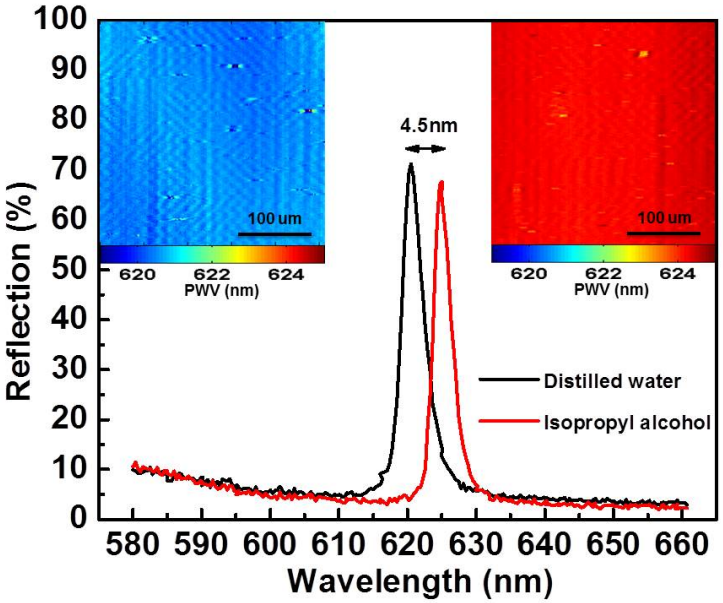

Fig. S1

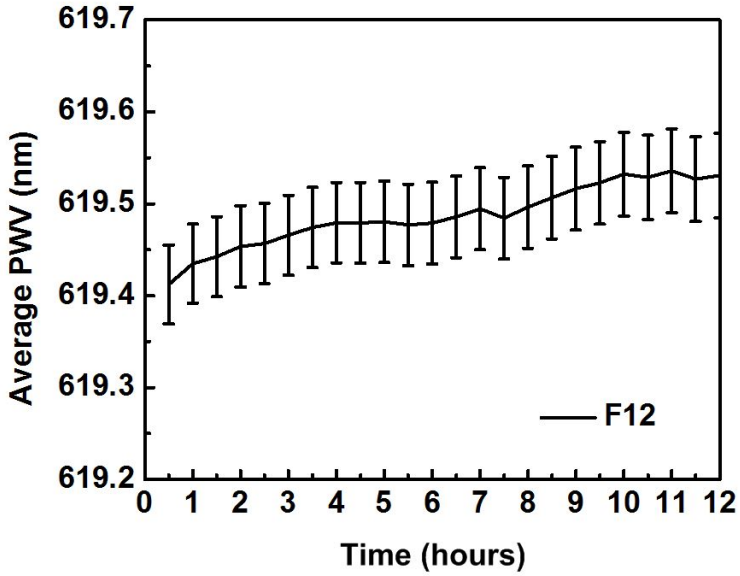

Fig. S2

Supplementary Video Legends

Video S1: Attachment of Murine Dental Stem Cells (mHAT9a). Cells were seeded at 20,000 cells/ml and allowed to attach over a period of three hours to a fibronectin-treated PC sensor. PWV images were taken every 3 minutes for a period of one hour and sequenced into a video.

Video S2: Detachment of mHAT9a Cells. Cells were seeded at 8,000 cells/ml and allowed to attach over a period of three hours to a fibronectin-treated PC sensor. 2 μM Staurosporine was added and mixed with the cell media on the sensor. PWV images were taken every 20 minutes for 18 hours and sequenced into a video.

Video S3: Chemotaxis of mHAT9a Cells. Cells were seeded at 8,000 cells/ml and allowed to attach over a period of three hours to a fibronectin-treated PC sensor. A SDF-1α soaked bead was placed via pipette tip about 100 microns beyond the top of the field of view. PWV images were taken every 20 minutes for 5.5 hours and sequenced into a video.

Video S4: Loss of Chemotactic Function in CXCR4 Deficient mHAT9a Cells. Cells were seeded at 8,000 cells/ml and allowed to attach over a period of three hours to a fibronectin-treated PC sensor. A SDF-1α soaked bead was placed via pipette tip at the top of the frame. PWV images were taken every 20 minutes for 6 hours and sequenced into a video.