Supporting information

Focal Adhesion Clustering Drives Endothelial Cell Morphology on Patterned Surfaces

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Figure S1: Spreading of water droplets on Un (a), µP (b), µG (c), Un\* (d), µG\* (e) substrates.

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Figure S2: Fabrication of the µG\* substrates. Epifuorescent images of a µG\* substrate coated with FITC-PLL-PEG before and after UV irradiation.

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Figure S3: Z-stack projection confocal image and corresponding fluorescence intensity distribution profile of a BAEC cultured for 24 hrs on µG-0.7µm (a) and µG-2µm (b) substrates. FAs (green) were visualized with anti-vinculin antibody and superimposed onto the transmission image (grayscale). The zero position corresponds to the beginning of a ridge. Scale bar is 4 µm.

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Figure S4: Z-stack projection confocal image of fibronectin distribution (red) superimposed on the transmission image (grayscale) of a µG-FnR substrate. Scale bar is 10 µm.

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Figure S5: Cell orientation (a) and elongation index (b) for BAECs (n=23 cells) cultured on a µG\_2 µm surface. Data are mean±SEM.

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Figure S6: Confocal z-scan imaging and corresponding fluorescence intensity distribution profiles of BAECs cultured for 24 hrs on a µG substrate in the presence of blebbistatin (a=apical plane, d=basal plane). FAs (green) were visualized with an anti-vinculin antibody and were superimposed on the transmission image (grayscale). The zero position corresponds to the beginning of a ridge. Scale bar is 5 µm.