

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Oscillating MDCK cell on a 20 μm track. Phase contrast images. Scale bar 100 μm .

File Name: Supplementary Movie 2

Description: Static MDCK cell on a 20 μm track. Phase contrast images. Scale bar 100 μm .

File Name: Supplementary Movie 3

Description: Oscillating MDCK cell on a 20 μm track. Fluorescence intensity of PBD-YFP. Scale bar 50 μm .

File Name: Supplementary Movie 4

Description: MDCK cell on a 20 μm track, alternating between oscillatory and static phases. Fluorescence intensity of PBD-YFP. Scale bar 50 μm .

File Name: Supplementary Movie 5

Description: MDCK cell on a control (top, same video as Supplementary Video 1) and a conditioned (bottom) 20 μm track. Scale bars 100 μm .