

Biophysical Journal, Volume 99

Supporting Material

Embryonic Stem Cells Do Not Stiffen on Rigid Substrates

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Supplementary Materials

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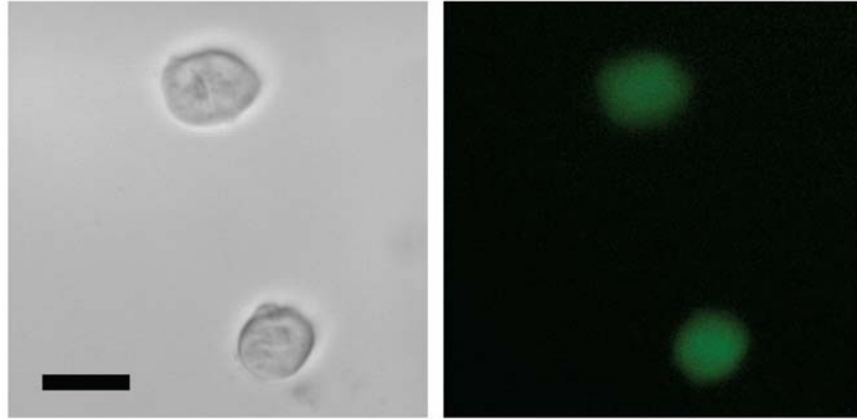
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Supporting Figure

Figure S1



Supporting Figure Legend

Figure S1 Representative fluorescent image of Oct3/4 expression, a primary marker for pluripotency, in two mouse ESCs plated on collagen-1 coated 0.6 kPa substrate. Bright-field image (left) and corresponding green fluorescent protein (GFP) image (right) of *Oct3/4* expression from the same cells are shown. Expression of stably transfected GFP was driven by *Oct3/4* promoter in the presence of leukemia inhibitory factor (+LIF). The GFP *Oct3/4* expression is specific to the ESCs since it is inhibited by *Oct3/4* shRNA (1) and when these ESCs become differentiated after adding Retinoic Acid (1 μ M) and removing LIF (2). All stiffness and traction measurements were done on single undifferentiated, homogeneous, pluripotent ESCs (assessed by the uniformly high GFP *Oct3/4* intensity in each ESC with unique cell shape, colony-forming capability, and the short cell doubling time (\sim 10.5 hrs)) plated on collagen-1 (200 μ g/ml) coated polyacrylamide gels of varying stiffness. Scale bar = 10 μ m.

REFERENCES and FOOTNOTES

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