ECM dimensionality tunes actin tension to modulate endoplasmic reticulum function and spheroid phenotypes of mammary epithelial cells

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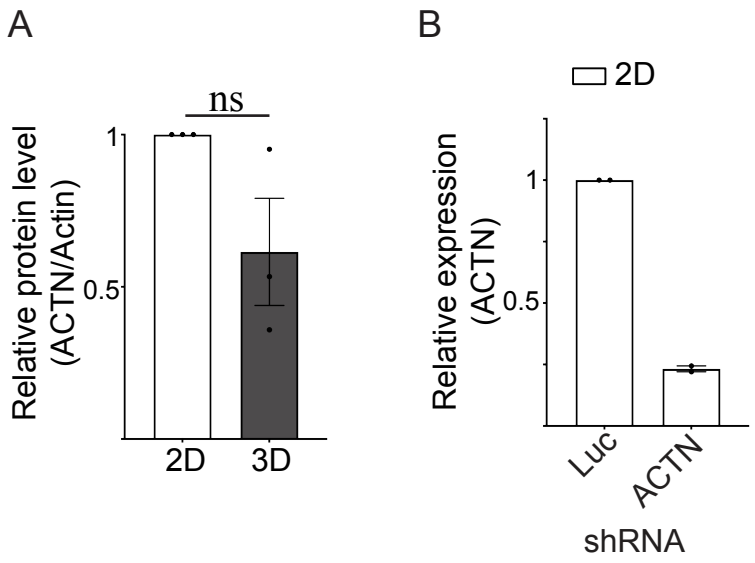
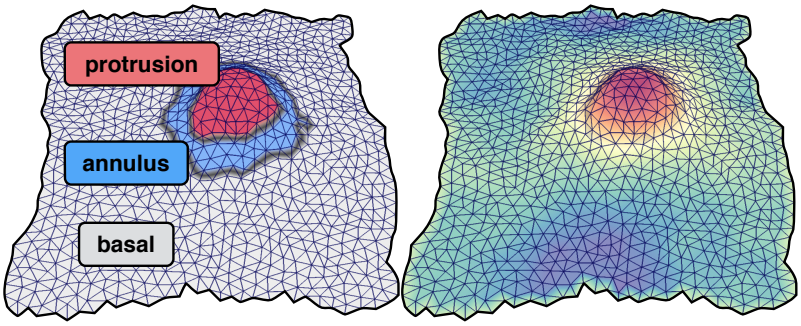
Appendix Figure S1



Appendix Figure S1. rBM ligation in 3D does not decrease actinin expression level. (A) The expression level of actinin in MCF10A MECs ligated to rBM in 2D and 3D for 18h was assessed via immunoblot and quantified relative to loading control actin (mean ± SEM; n=3 independent biological replicates). ns, not significant (Student's t test). **(B)** Bar graph of the levels of endogenous actinin (ACTN) in MECs stably expressing shRNA against ACTN or luciferase (Luc) (mean ± SEM; n =2 independent biological replicates).

Appendix Figure S2



Appendix Figure S2. Snapshot of membrane simulation. (Left) Three inhomogeneous Widom regions (protrusions, annulus, and basal regions) and (right) a heightmap of the z-axis of a membrane protrusion are shown.

Appendix Table S1

Initial link length	A/Ap	Renormalized σ ($k_BT/ a0^2$)	Renormalized σ (μN/m) a_0 = 10 nm
1.27	1.0754	0.165312855	6.794358356
1.3	1.0295	0.51881372	21.32324391
1.33	1.0156	0.85017139	34.94204415
1.35	1.0132	1.066002153	43.81268848
1.38	1.0117	1.390551811	57.15167943
1.4	1.0112	1.619003582	66.54104724

Appendix Table S1. Membrane excess area and renormalized surface tension.