

Suppl. Fig. 1. (A) Confocal microscopy analysis of phalloidin-Alexa488 stained MCF10A cells adhered a COLI-coated microsphere or a tissue culture surface (Z stack projection). Dotted circle indicates microsphere circumference. (C) Kinetics of MDA-MB-231cell adhesion to COL1, LAM or FN. (D) Flow cytometry analysis of microspheres shows uniform ECM protein coating. Bar: 10 μm.



Suppl. Fig 2. Cell morphology is context dependent. Human mammary epithelial cells (HMEC) adopt different morphologies when adhered to different ECM matrices. Bar: 30µm.



Suppl. Fig. 3. CD227 analysis of partially trypsinized ovarian carcinoma cells from patient ascites fluid. Control is (unstained) cell autofluorescence.

pERK	Uncoated	Collagen I	Collagen IV	Fibronectin	Vitronectin	Laminin
Control	0	0	0	0	0	0
ECM only	0.11	0.08	0.21	0.06	0.11	0.35
Serum	0.43	0.66	0.59	0.56	0.38	0.51
PMA	1.4	0.95	1.14	1.61	1.21	1.22
EGF	0.09	0.58	0.09	0.77	0.58	0.7

рАКТ	Uncoated	Collagen I	Collagen IV	Fibronectin	Vitronectin	Laminin
Control	0	0	0	0	0	0
ECM only	0.70	0.38	0.70	0.27	1.35	1.37
Serum	0.71	0.60	0.71	1.10	1.26	1.36
PMA	0.30	- 0.26	0	0.51	- 0.02	0.45
EGF	0.63	0.78	0.40	1.25	1.52	1.61

Suppl. Table 1. MFI changes for pERK and pAKT for each condition tested in Figure 3. Log2 value of phospho-protein levels upon stimulation compared to basal phosphorylation levels is shown.

Suppl. Movie 1. Animated Z stack projection of confocal microscopy analysis of phalloidin-Alexa488 stained MCF10A cells adhered a COLI-coated microsphere shown in Suppl. Fig 1.