Electronic Supplementary Material (ESI) for Biomaterials Science.

Photoactivatable Substrates Show Diverse Phenotypes of Leader Cells in Collective Migration When Moving Along Different Extracellular Matrix Proteins

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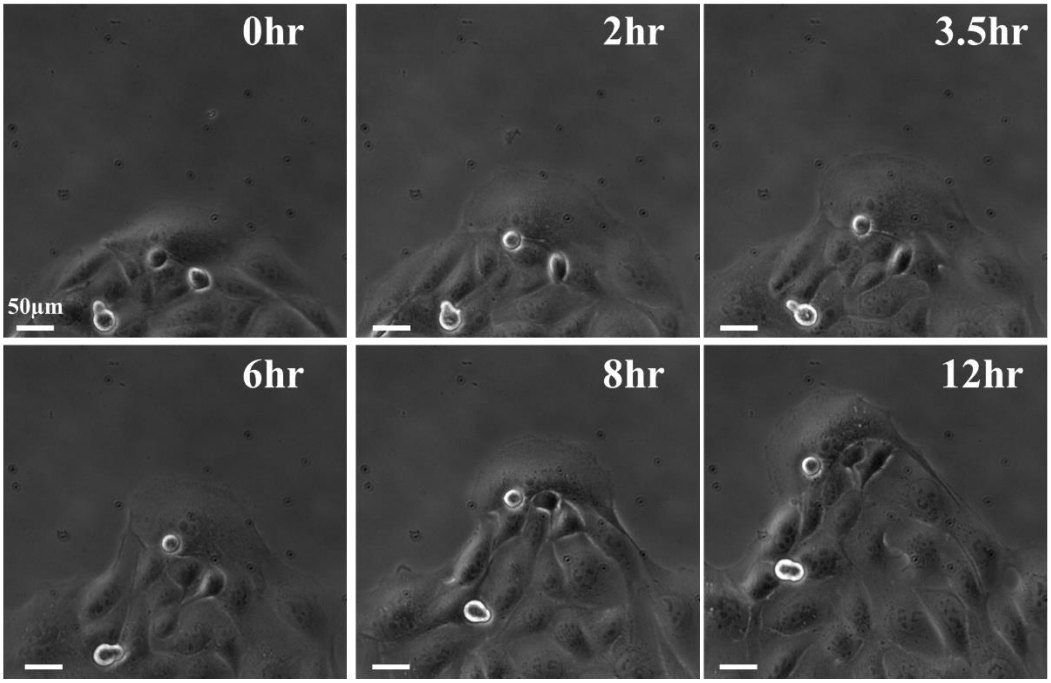

Figure S1: Phase contrast images show the appearance of a leader cell from the edge of a circular cluster and its migration for various hours.

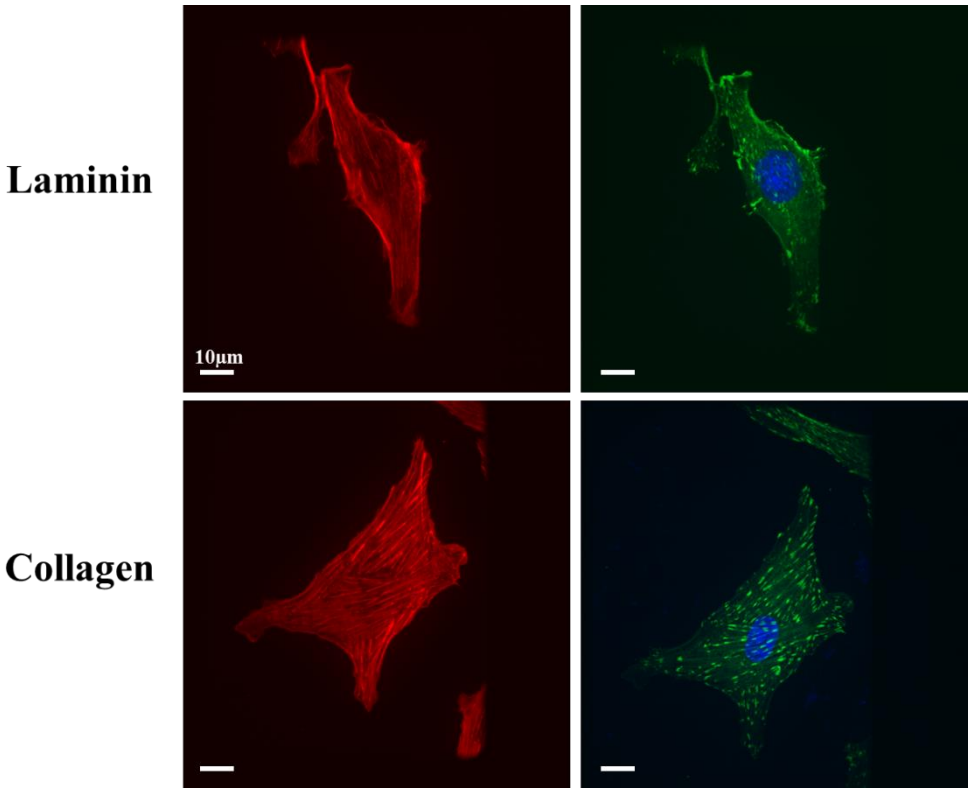

Figure S2: Fluorescence images of a single MDCK cell stained for vinculin (green), actin (red), and nucleus (blue) cultured in laminin and collagen-coated surfaces after photoirradiation.

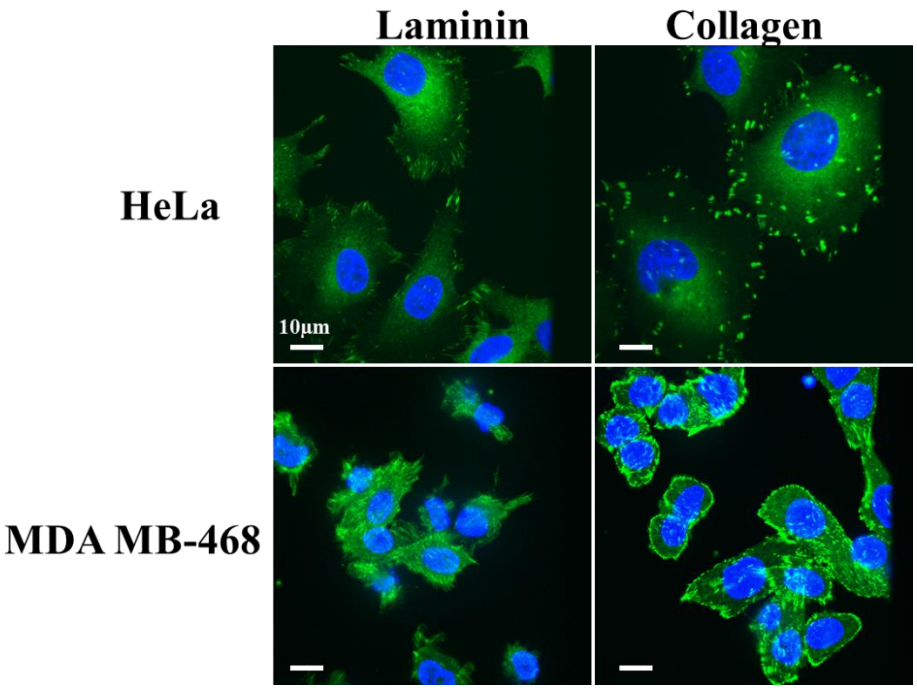

Figure S3: Fluorescence images of HeLa and MDA MB-468 cells stained for vinculin (green) and, nucleus (blue) cultured in laminin and collagen.

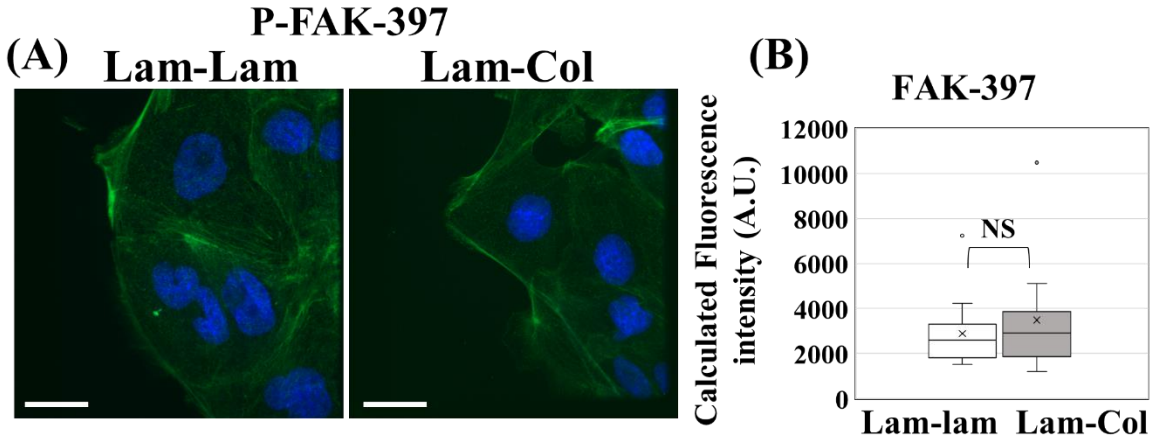

Figure S4: (A) Fluorescence images of Leader cells for p-FAK-397 (green), and nucleus (blue) after their migration in laminin-Laminin and Laminin-collagen. (B) Calculated fluorescence intensity of p-FAK-397 of leader cells after their migration in laminin-laminin and Laminin-collagen (N= 11 cells).

Movie-1: Collective migration and cluster expansion for MDCK on surfaces of laminin-laminin, laminin-collagen, collagen-collagen, and collagen-laminin.

Movies-2: Collective migration and cluster expansion for MDCK cells on surfaces laminin-laminin and laminin-collagen with and without an AIIB2 blocking antibody.