



Figure S1. Invadopodia of MDA-MB-231 cell visualised by fluorescent and electron microscopy. a)

Fluorescence microscopy images of MDA-MB-231 cell line (green: MT1-MMP-GFP, red: mCherry-LifeAct). **Top:** A cell body with marked position of a single xz slice. **Bottom:** Single xz slice from the same position of the cell body as FIB-SEM slice in (b). Scale bars 5 μm (top), 2 μm (bottom). **b)** Single EM slice of MDA-MB-231 corresponding to the LM xz slice in (a). Blue square represents position of the 3D rendered region in (c). Yellow line represents a position of the top of a collagen layer. Scale bar 2 μm . **c)** 3D rendering of an invadopodium. EM dataset (101 slices with (b) slice in the center) was denoised using NIS-Elements denoise.ai, cropped in the area specified in (b), inverted, and rendered in 3D using ICY. Visualisation of collagen filaments was achieved by applying a manual threshold in an intensity histogram. Scale bar 0.5 μm .