Carbon Nanotubes Induced Fibrogenesis on Nanostructured Substrates

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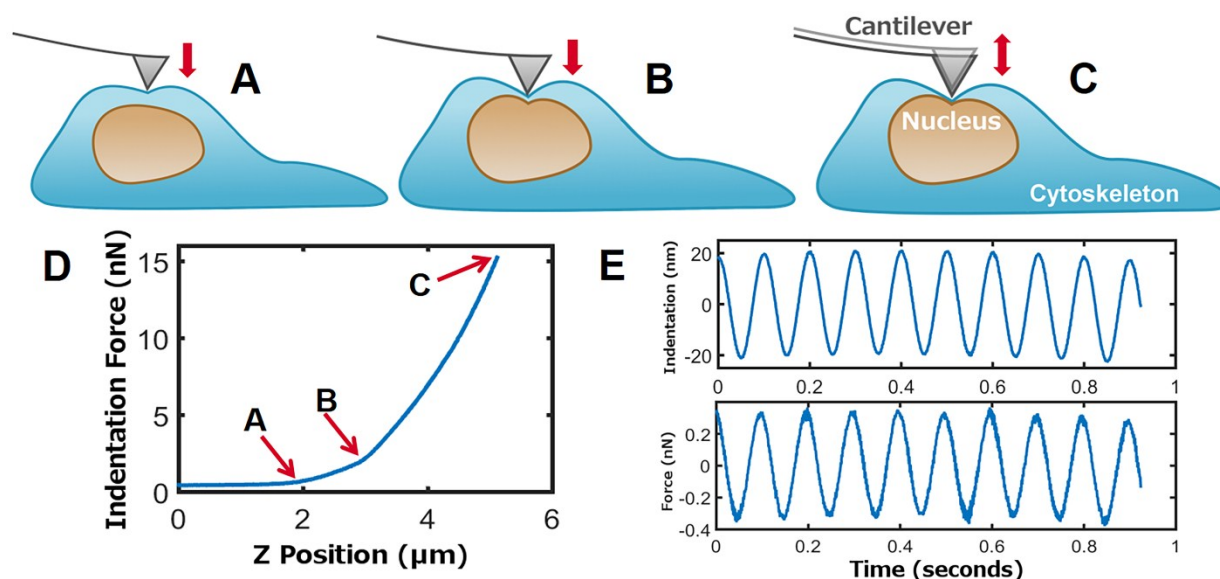
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Fig. S1 Force curve acquisition. (A) The cantilever of the AFM first makes contact with the cytoskeleton positioned over the nucleus. (B) The cantilever begins to indent into the nucleus, causing an increase in the second derivative of the force curve. (C) The cantilever is programmed to oscillate at the lowest position of the indentation. (D) Depiction of where events (A), (B), and (C) occur on a force – indentation curve. (E) A graphical depiction of the indentation and force oscillation at position (C).
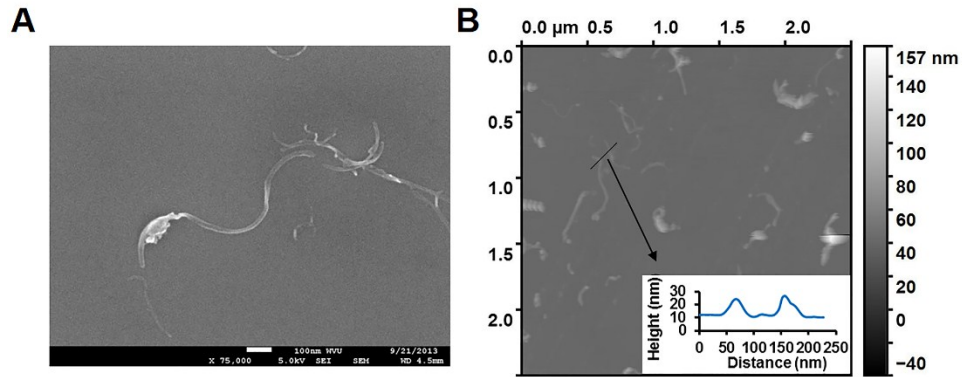
Fig. S2 Characterization of MWCNTs. (A) SEM micrographs of MWCNTs. Scale bar is 100 nm. (B) AFM topography of MWCNTs. The inset shows the height of MWCNTs as marked with black line in (B).
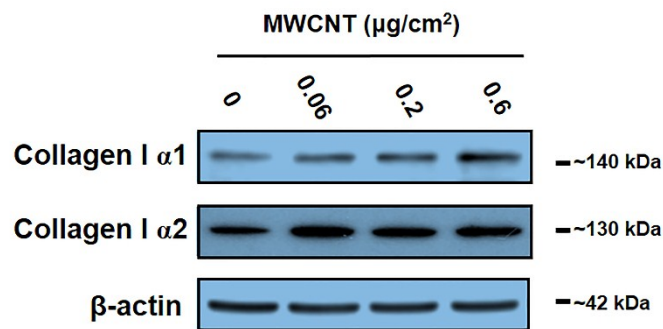

Fig. S3 Expression of collagen I α1 and α2 in fibroblasts treated with MWCNTs at various doses. β-actin was used as the loading control.

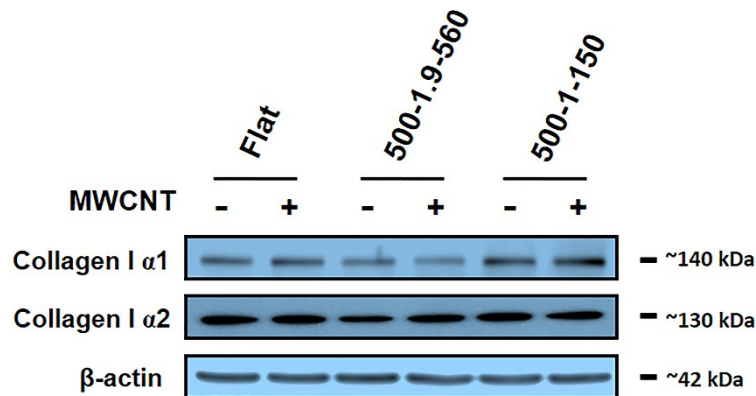**Fig. S4 Expression of collagen I α1 and α2 in fibroblasts grown on various substrates in response to MWCNTs at 0.2 µg/cm².** β-actin was used as the loading control.

Table 1. A list of antibodies used for western blotting analysis

Primary Antibody	Origin/ Isotype	Supplier/ Cat#	Dilution
Collagen 1	Rabbit IgG1	Fitzgerald/ 70R-CR007x	1:3000
Collagen 1 α1	Rabbit IgG	ThermoFisher scientific/ PA5-35380	1:1000
Collagen 1 α2	Rabbit IgG	Abcam/ ab208638	1:500
β-actin	Mouse IgG1	Sigma/ A5441	1:4000