



Fig. S1. Schematic representation of a single traction force microscopy experimental dataset and key analytical parameters. Traction forces (blue line) in pre- and post-stimulation (red arrow) phases are depicted. Increases in force were always measured relative to the mean pre-stimulation traction force [green line; $\text{mean}(f_{\text{pre}})$]. Maximal increases in force due to fluctuations as cells turn over adhesions and migrate in the pre-stimulation phase were characterized by the maximum increase in force during pre-stimulation [$\text{max}^+(\Delta f_{\text{pre}})$]. Similarly, maximal increases in force due to cellular contraction post-stimulation were characterized by the maximum increase in force during post-stimulation [$\text{max}^+(\Delta f_{\text{post}})$].