

Supplementary Information to

Mechanical properties of murine hippocampal subregions investigated by atomic force microscopy and *in vivo* magnetic resonance elastography

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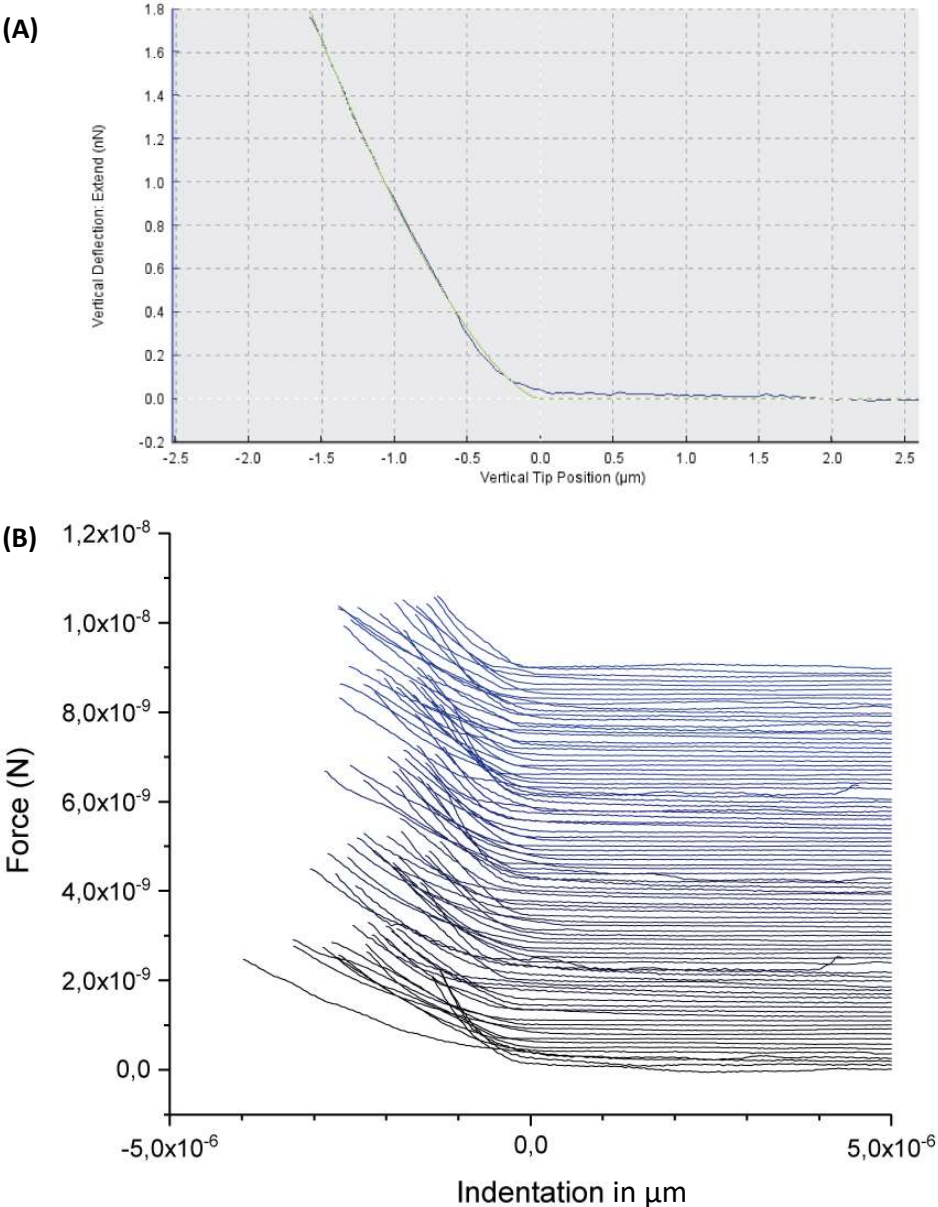
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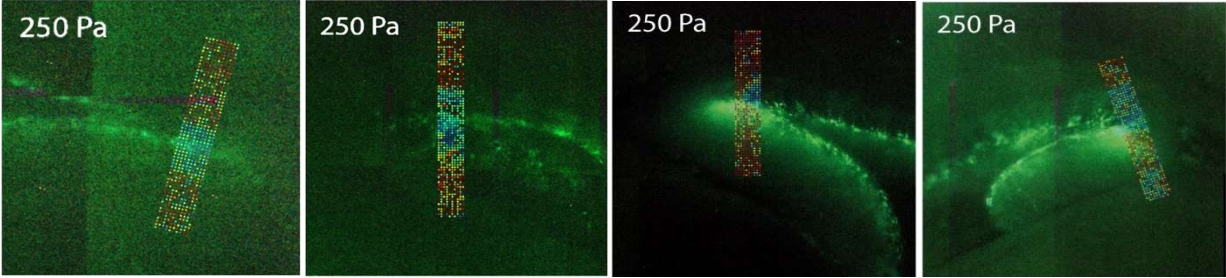
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Supplementary Figure 1



Supplementary Figure 1 Force indentation curves. (A) AFM acquires force-distance curves (blue curve), which are then shifted such that the contact point is at the origin. A simple Hertz model according to equation (1), main text, is fitted (green curve) to each measurement curve to recover Young's modulus, which basically determines the slope of the measurement curve. **(B)** A series of approximately 80 measurement curves showing smooth curvatures and indicating the validity of the Hertz model with different Young's moduli (slopes).

Supplementary Figure 2



Supplementary Figure 2 Fluorescent image overlaid with Young's modulus maps from atomic force microscopy (AFM). Green color indicates nestin expressing cells as a marker of neurogenic activity. The color scale of the Young's modulus heat maps runs from 0 to 250 Pa as indicated in the images.