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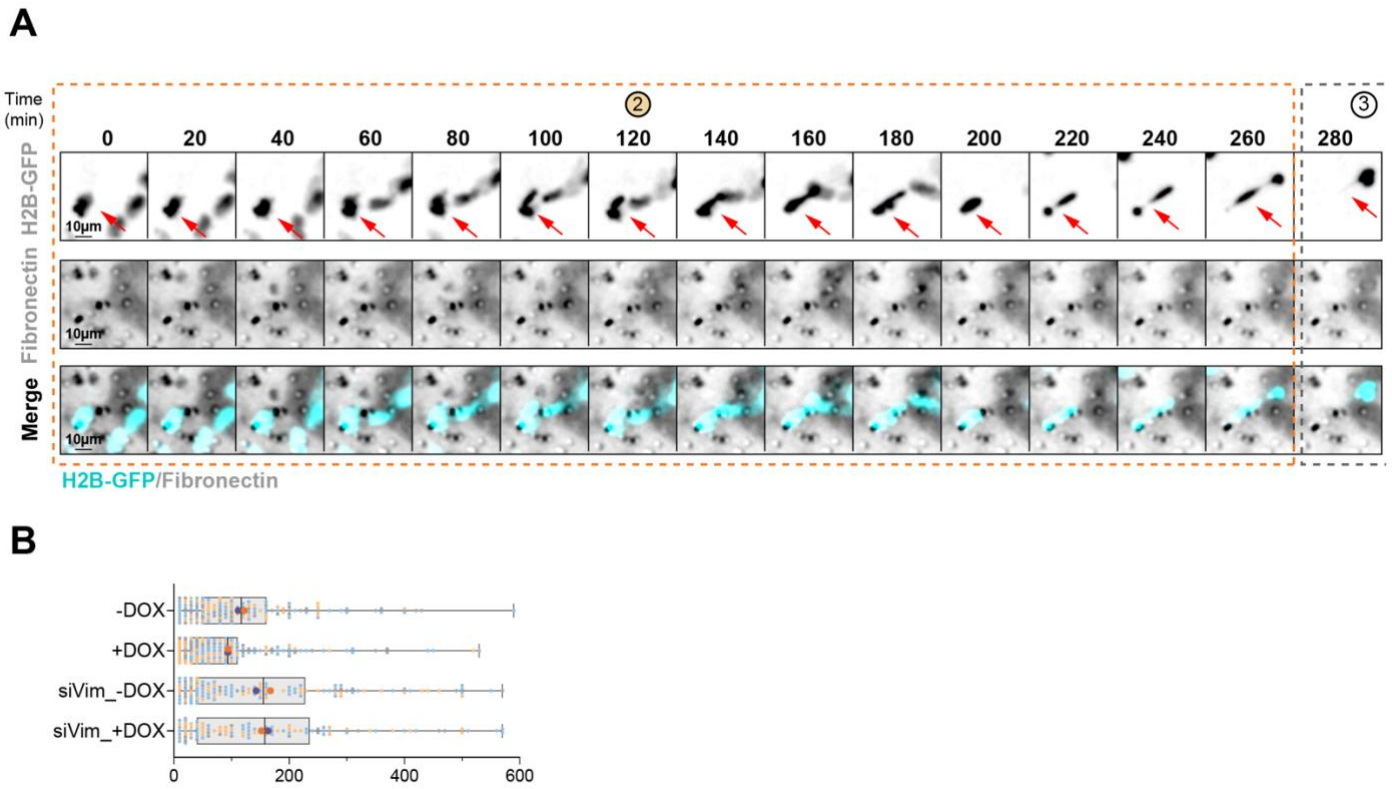

Appendix Figure S1.

A. Time lapse of RPE-1 H2B-GFP cells depleted of vimentin migrating through small pores (5 µm). Red arrow indicates a nucleus crossing a small pore. A highly deformed nucleus can be seen at 220-260 minutes due to vimentin depletion. Scale bar = 10 µm.

B. Quantification of time spent by the nucleus to cross 5 µm-diameter constrictions. $n=_{(-DOX\ siCtr)}=145$; $n=_{(+DOX\ siCtr)}=160$; $n=_{(-DOX\ siVimentin)}=128$; $n=_{(+DOX\ siVimentin)}=105$. Data represent 2 independent experiments. Vertical line represents the median and whiskers the minimum (left quartile) and maximum values (right quartile).

We observed that upon vimentin depletion, nucleus spends in average ~155±17 min (-DOX) and 157±8 min (+DOX) to cross 5 µm constrictions, when compared with control cells (-DOX; 116±7 min) or cells with amplified centrosomes (+DOX; 93±0.2 min). Thus, these data suggests that loss of vimentin leads to higher nuclear deformability in cells migrating through small constrictions that compromises efficient migration.