

Figure S1. Enigma PDLIM5/7 family proteins are not required to regulate Src protein levels or Src auto-phosphorylation, but are required for Src to promote normal nuclear localization of YAP5SA.

(A) Silencing of both PDLIM5/7 expression in human Caco2 cells has no effect on levels of pSRC both by Immunofluorescence and Immunoblot. Note silencing efficiency is displayed on Immunoblot. (B) Silencing of PDLIM5/7 and expressing YAP5SA results in a significant decrease in the nuclear localisation of YAP as shown on graph. Protein levels of YAP5SA are unaffected on Immunoblot. ** p < 0.01 n = 3.

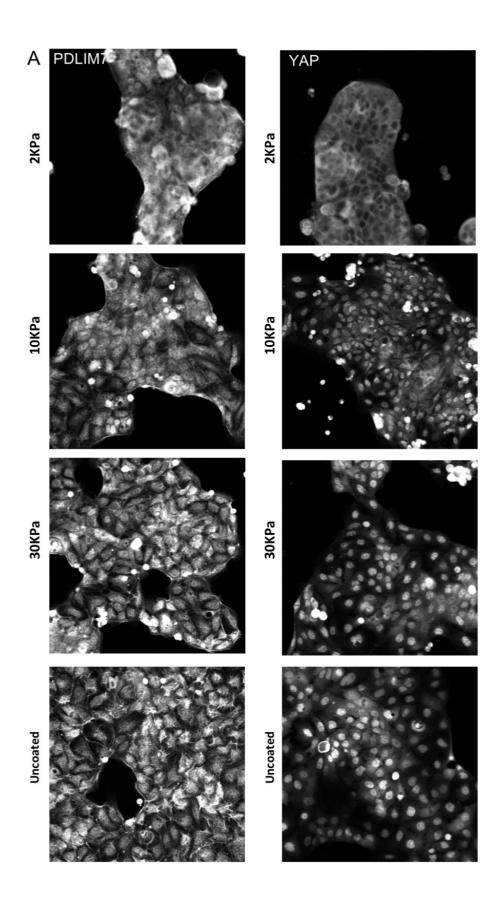


Figure S2: PDLIM7 and YAP subcellular localization are regulated by substrate stiffness.

(A) Localisation of YAP and PDLIM7 changes as hydrogel substrate stiffness increases.

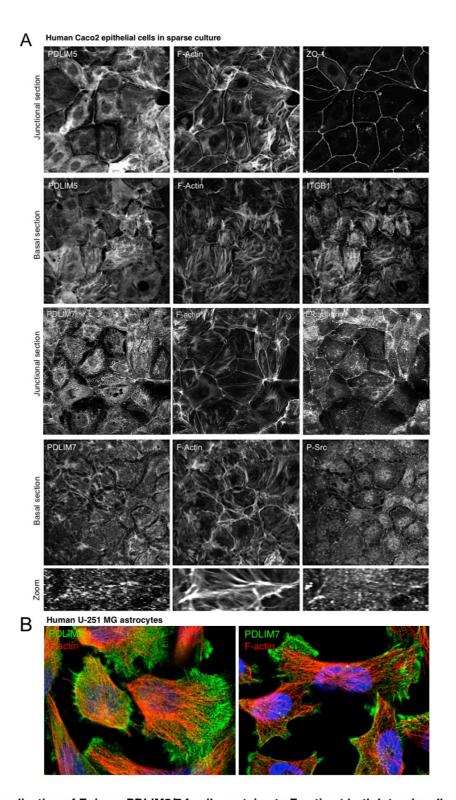


Figure S3. Localisation of Enigma PDLIM5/7 family proteins to F-actin at both Integrin adhesions and adherens junctions.

- (A) Caco2 epithelial cells showing junctional and basal planes of PDLIM5 and PDLIM7 showing basal localisation of the proteins to F-actin, Integrin-beta1 and pSRC and junctional localisation to F-actin, ZO-1 and E-cadherin.
- (B) U-251 astrocytes showing basal planes of PDLIM5 and PDLIM7 localizing to F-actin and focal adhesions. Adherens junctions do not form between astroctyes. Data were mined from www.proteinatlas.org.

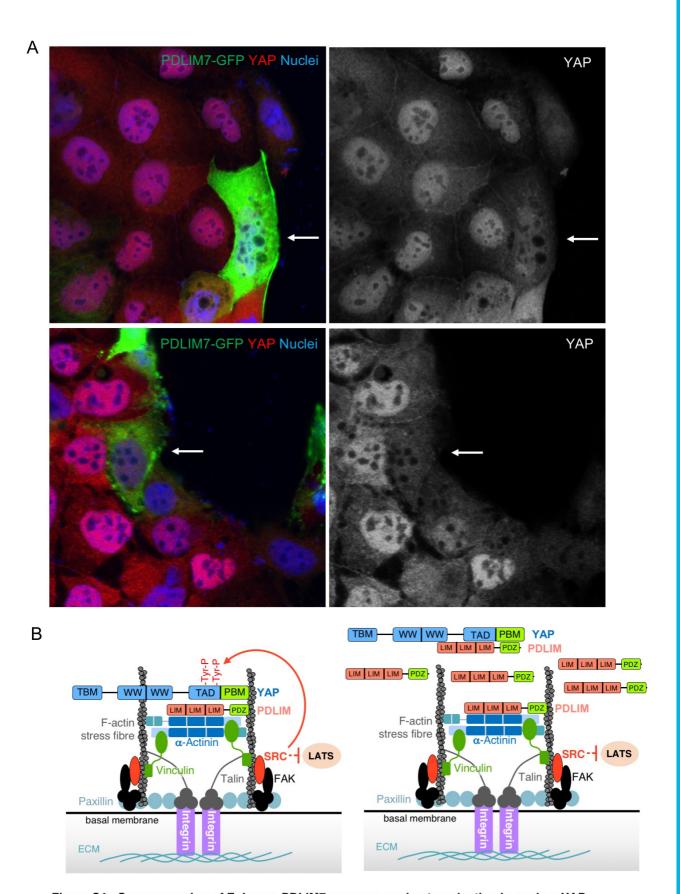


Figure S4. Overexpression of Enigman PDLIM7 causes a moderate reduction in nuclear YAP.

- (A) Single flattened cells at the edge of colonies transfected with PDLIM7-GFP reveal a reduced level of YAP in the nucleus despite strong mechanical stimulation.
- (B) Schematic diagram showing the possible effect of PDLIM7 overexpression in preventing YAP phosphorylation at Integrin adhesions, which is then predicted to reduce YAP nuclear localisation.