



**Fig. S1. An activating mutation within the  $\beta 3\text{-}1\text{A}$  YA transmembrane region (L712R) restores cell spreading.** (A) Shown are the sequences from the WT and YA  $\beta 3\text{-}1\text{A}$  integrin subunits containing a leucine to arginine substitution (L712R). (B) CHO K1 cells were transiently transfected with expression vectors for the indicated subunits: WT ( $\alpha IIb\text{-}5$  &  $\beta 3\text{-}1\text{A}$  WT); YA ( $\alpha IIb\text{-}5$  &  $\beta 3\text{-}1\text{A}$  YA); WT L712R ( $\alpha IIb\text{-}5$  &  $\beta 3\text{L712R-1A}$  WT); and YA L712R ( $\alpha IIb\text{-}5$  &  $\beta 3\text{L712R-1A}$  YA). Cells were then adhered to fibrinogen for 1 hour in CCM1 and assayed for spreading. Plotted is the average cell area  $\pm$  s.d. from 3 independent experiments,  $n=150$ . (\*)  $p<0.05$ .