

**Supplementary Figure 10** AA activates ERK signaling in a collagen synthesis-dependent manner. The whole cell extracts at day-5 were analyzed by Western blot with phospho-specific antibodies against ERK1/2 (p-ERK1/2). The amounts of total ERK1/2 was shown as loading control. ERK activation is defined as the ratio of p-ERK/total ERK. Data are quantified from 5 assays and expressed as means  $\pm$  SEM. \*P<0.01 vs. corresponding values.