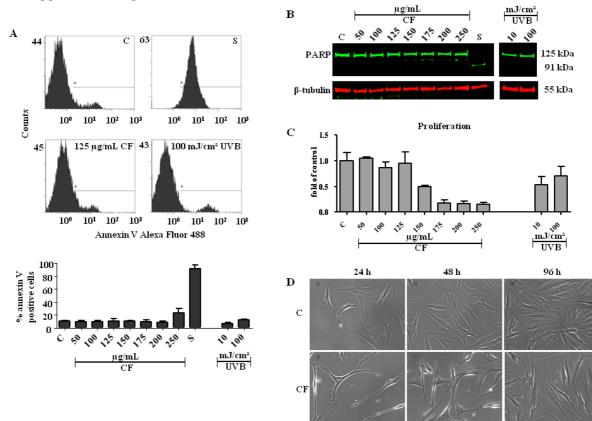
**Supplemental Figure S1** Apoptosis and proliferation in response to CF and UVB. Human skin fibroblasts were incubated for 24 hours with CF (50-250  $\mu$ g/ml) generated by digestion of type I collagen gels. Furthermore the response to 10 and 100 mJ/cm<sup>2</sup> was investigated. A, apoptosis was analysed by annexin V FACS analysis. Staurosporin (2  $\mu$ M, 24h) served as positive control.

Original flow cytometry plots demonstrating the gating procedure for detection of annexin V binding events in control cells (C), staurosporin (S), collagen fragment (CF) and UVB treated cells. B, PARP cleavage was determined by immunoblotting to test for apoptosis in response to CF and UVB;  $\beta$ -tubulin served as loading control. C, proliferation was estimated by determination of DNA synthesis using [<sup>3</sup>H]-thymidine incorporation. D, morphology of skin fibroblasts 24, 48 and 96 hours after addition of CF compared to controls at 24 hours; n = 3-4, mean ± SEM, \*, p < 0.05.

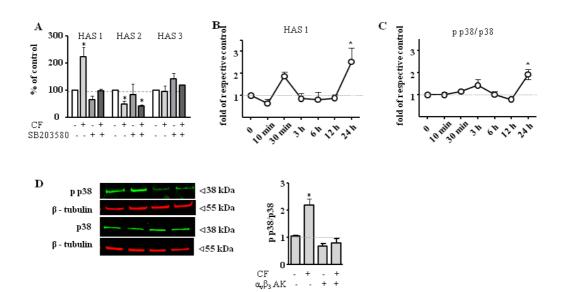
**Supplemental Figure S2** *CF induce HAS1 mRNA via*  $\alpha_{\nu}\beta_{3}$ *-integrins and p38.* A, HAS isoform mRNA expression in response to CF plus minus the p38 inhibitor SB203580. B, time course of HAS1 mRNA in response to CF. C, time course of the ratio of phosphorylated p38 (p p38) and total p38 as evidenced by immunoblotting in response to CF. D, phosphorylated p38 in response to CF (24 h) plus minus  $\alpha_{\nu}\beta_{3}$ *-blocking antibody* LM609 (5 µg/ml) or the IgG control; n = 3, mean ± SEM, \*, p < 0.05.

**Supplemental Figure S3** *Inhibition of nuclear ERK1/2 activity by UVB.* A, nuclear translocation of pERK was visualized in optical sections (Zeiss ApoTome, Axio Observer Z1) and quantified in 4 images per slide of 3 independent experiments using ImageJ, mean  $\pm$  SEM, \*, p < 0.05.

**Supplemental Figure 1** 



**Supplemental Figure 2** 



## Supplemental Figure 3

