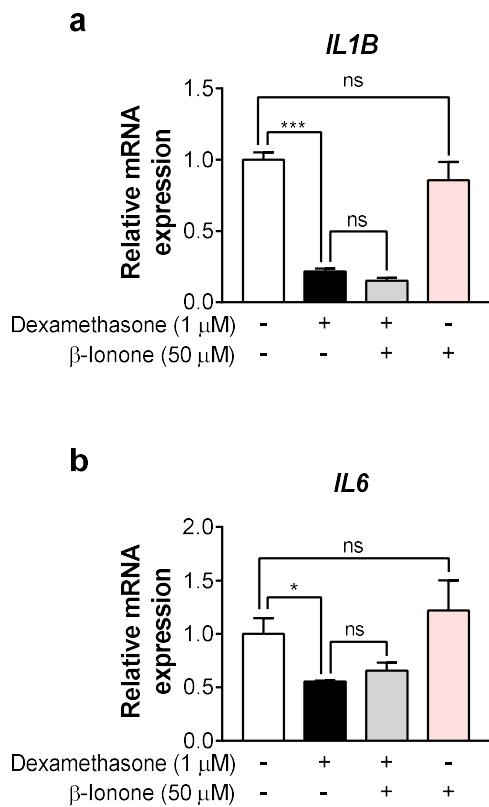


Supplementary Figure 1. β -Ionone treatment has no effect on the collagen synthesis in the basal model. The cells were treated with vehicle (dimethyl sulfoxide) or β -ionone (50 μ M) for 24 h and the procollagen type I c-peptide content was measured in the culture supernatants of the dermal fibroblasts. Values are shown as mean \pm standard error of the mean (SEM) of three experiments. Statistical significance is expressed as follows: ns, not significant ($p > 0.05$).



Supplementary Figure 2. β -Ionone has no effect on the expression of pro-inflammatory genes in human dermal fibroblasts. (a,b) The cells were treated with vehicle (DMSO), dexamethasone (1 μ M) or β -ionone (50 μ M) for 12 h and gene expression levels of interleukin 1 beta (IL1B) and IL6 were measured. Values are shown as mean \pm standard error of the mean (SEM) of three experiments. Statistical significance is expressed as follows: ns, not significant ($p > 0.05$), * $p < 0.05$, *** $p < 0.001$.

Supplementary Table 1. Primer sequences.

Gene description	Sequence (5'→3')
Annexin A4 (ANXA4)	F: ACCAGCAGCAATATGGACGG R: TTCGGTCCGGGAACAGAG
AT-rich interaction domain 5b (ARID5B)	F: GCAGTCACATGCTGTAGCTTC R: TCTTCTTGTGGCATGGTTTC
B-cell lymphoma 6 (BCL6)	F: GTCCTGCAGCAGTAAGAATGCCTG R: GGCTGTTGAGCACCGATGAACCTGT
Collagen type I α 1 chain (COL1A1)	F: ACATGTTCAGCTTGTGGACC R: TGTACCGCAGGTGATTGGTGG
Collagen type I α 2 chain (COL1A2)	F: CGGACTTGTGCTGCTTGC R: CAGCAAAGTCCCACCGAGA
DNA damage inducible transcript 4 (DDIT4)	F: TGAGGATGAACACTTGTGTGC R: CCAACTGGCTAGGCATCAGC
Dual specificity phosphatase 1 (DUSP1)	F: TGGAGGAAGGGTGTGTC R: CAAGGCAGATGGTGGCTGA
ErbB receptor feedback inhibitor 1 (ERRFI1)	F: GGCCTCACAGGTTGGAGATG R: TTCATCGGAGCAGATTGGAAAG
FK506 binding protein 5 (FKBP5)	F: GTCCAAGCCTCAGAGTCGTT R: AGCCTTCTCATGGCACTGTC
Glyceraldehyde-3-phosphate dehydrogenase (GAPDH)	F: TCTGAAAGCTGTGGCGTGA R: TACTGGCAGGTTCTCCAGG
Glucocorticoid-induced leucine zipper (GILZ)	F: TCCTGTCAGGCCCTGAAGAG R: AGCCACTTACACCGCAGAAC
Glutamate-ammonia ligase (GLUL)	F: AGAAGAGCGGAGCGTGAG R: CATGGTGGAAAGGTGTTCTGGTC
Hyaluronic acid synthase 2 (HAS2)	F: GAGCAGCCCATTGAACCAAGA R: AGGAAGCGCAGAATTGGGAG
Interleukin 1 beta (IL1B)	F: GAGCTGCCAGTGAATGATGG R: CTTGCTGTAGTGGTGGTCGG
Interleukin 6 (IL6)	F: TGCAATAACCACCCCTGACC R: GTGCCCATGCTACATTGCC
Kruppel-like factor 13 (KLF13)	F: ACGCCAACCTCCACCCAG R: TTCGCTCAGCTTCCTATTACC
Metallothionein 1E (MT1E)	F: CCCTTGCTCGAAATGGA R: GGGTTTGTGTCACCGAG
Metallothionein 2A (MT2A)	F: GCTCCTGCAAATGCAAAGAGTG R: CTTGTCGACGCCCTTG
Nuclear factor kB inhibitor α (NFKBIA)	F: AGCACAAAGAGAGTGTGGC R: CAGCGTCATGGTTATGG
Phosphoinositide-3-kinase regulatory subunit 1 (PIK3R1)	F: AGCATTGGGACCTCACATTACACA R: ACTGGAAACACAGTCCATGCACATA
Serum deprivation response protein (SDPR)	F: AGTCACGGTGCTCACGCTCC R: GTTGCTGGTGGAGGCCTGGT
Solute carrier family 19 member 2 (SLC19A2)	F: AGCCAGACCGTCTCCTTGT R: TAGAGAGGGCCCCACACAC
Zinc fingers and homeoboxes 3 (ZHXB3)	F: GGTGTCTGAGAACAGTGAGTCG R: GCAGGGGGTTCCAGACTGG