



**Figure S1: Knockdown (KD) of SERPINB8 dysregulates desmosomal mRNA expression levels**

**(A)** The efficiency of the KD of SERPINB8 in non-stretched and stretched keratinocytes was validated by immunoblotting. **(B)** KD of SERPINB8 was further verified using quantitative real-time PCR (qPCR). It revealed a decrease in *SERPINB8* mRNA expression in stretched control cells compared to non-stretched control cells. In addition, mRNA expression levels for desmoplakin isoforms I and II as well as desmoglein-1 were decreased in non-stretched *SERPINB8*-KD cells compared to NTP control cells. Stretched *SERPINB8*-KD cells showed no significant change of mRNA levels for either desmoplakin isoforms I and II or desmoglein-1 compared to NTP control cells. Expression levels were calculated relative to those of hypoxanthine guanine phosphoribosyltransferase 1 (*HPRT1* [MIM: 308000]). Relative expression was determined as  $2^{-\Delta\Delta CT}$ .

**Table S1: *SERPIN8* Primer Sequences**

<b>Exon</b>	<b>Primer Sequence 5' – 3'</b>		<b>Product size (bp)</b>	<b>Annealing temperature (°C)</b>
1	Forward	TTTTTGGCCAAGGCAATTAG	499	60
	Reverse	CTCGCTCTGATTCCTGCTCT		
2	Forward	CTTCCACCTACCACCTCAGC	395	60
	Reverse	TCCTTCTACCTCCAGCTCCA		
3	Forward	ACGTTGAGAAACCCTGTGCT	392	59
	Reverse	TTCCAAGCACGTTTTAAGTCA		
4	Forward	GAAATGCAGTAAGAGAAAACAAAATG	299	60
	Reverse	AGGTCACAGTGGCAACACC		
5	Forward	GCCTCTGCCTTATGTGTCAAA	400	60
	Reverse	GCCTGGGTGACAAAAAGAGA		
6	Forward	TCAGCATAAATGTGCAGAAACA	372	62
	Reverse	CCCAACTGGAAACTCCTCAA		
7	Forward	ATGGGTGTGTGGGTATCAGG	483	64
	Reverse	GCAATTGCTCCTCTTTACGG		