

Supplemental Table 1: The sequence of qPCR primers

Regular qPCR primers		
Gene	Forward	Reverse
hPAD1	5'-CCTCACTGGCGTCGATATTT-3'	5'-TCACAGTTCACCAGCAAGATAG-3'
hPAD2	5'-GGTCAGCCATATCCATCTTCTC-3'	5'-GACAGATGGCACCAGGAATAA-3'
hPAD3	5'-GGCCAAGATAAGGTGTCCTATG-3'	5'-CAGAGTGACATGGAAGGAGATG-3'
hPAD4	5'-CCCTCCAGCCAAGAAGAAAT-3'	5'-AGTCTTGGGTCCGTAGTATGA-3'
hPAD6	5'-GCAGATCAGCTCCTGTCTAATG-3'	5'-TGAATGCACTTCTCCACGTATT-3'
hMZB1	5'-GGCAGGACTACGGAGTTCGAGAAG-3'	5'-TTCTCCAAACTCCCCAAGTAGTG-3'
hACTIN	5'-GTGACAGCAGTCGGTTGGAG-3'	5'-AGGACTGGGCCATTCTCCTT-3'
hGAPDH	5'-AGGTGAAGGTTCGGAGTCAACG-3'	5'-GATGACAAGCTTCCCGTTCTCAG-3'
qPCR primers for determining CRISPR efficiency		
Gene	Forward	Reverse
hPAD2	5'-ATGTCTACAGCGCGCCCCAGCCG-3'	5'-CTTGTCAGTCTGGCCTCGGTGCT-3'
hPAD4	5'-GACTCAGCTTGACATCTGCAGCTC-3'	5'-ATGAAATCTGAACCTTCTGGTCGC-3'
hMZB1	5- AGTGGACCAAGTGAACGTCTCAC - 3'	5- TTCTCCAAACTCCCCAAGTAGTG -3'