

**Table S1** Primer sequence for gene expression by qRT-PCR.

Gene	Primer sequence (5' → 3') *	GC (%)	Tm (°C)	PCR product (bp)	Reference paper
1. <i>Nrf2</i>	F: CAGCGACGGAAAGAGTATGA R: TGGGCAACCTGGGAGTAG	50.0 61.1	63.0 63.8	197	Xiong et al., 2015 [1]
2. <i>hTERT</i>	F: TGTACTIONTTGTCAAGGTGGATGTGA R: GCTGGAGGTCTGTCAAGGTAGAG	41.7 65.3	65.4 56.5	195	
3. <i>hTR</i>	F: TCTAACCCCTAACTGAGAAGGGCGTAG R: GTTTGCTCTAGAATGAACGGTGGAAG	50.0 46.2	67.1 68.4	127	Gourronc et al., 2010 [2]
4. <i>GAPDH</i>	F: AAGGTCATCCATGACAACCTTTG R: GTAGAGGCAGGGATGATGTTCT	40.9 50.0	63.0 66.0	226	

\*F = Forward primer and R = Reverse primer

**Table S2** Primer sequence for relative telomere length measurement by qPCR.

Position	Primer sequence (5' → 3') *	GC (%)	Tm (°C)	Reference paper
Telomeric repeat sequence	F: GTTTTTGAGGGTGAGGGTGAGGGTGAGGGTGAGGGT	59	71.1	Cawthon, 2002 [3]
	R: TCCCGACTATCCCTATCCCTATCCCTATCCCTATCCCTA	51	68.7	
<i>36B4</i> gene	F: CAGCAAGTGGGAAGGTGTAATCC	52	57.1	
	R: CCCATTCTATCATCAACGGGTACAA	44	56.0	

\*F = Forward primer and R = Reverse primer

**Relative telomere length (RTL)** is determined by a three-step calculation process including

1.  $T/S \text{ ratio} = \Delta C_T = C_{T \text{ telomeric repeat sequence}} - C_{T \text{ 36B4}}$
2.  $\Delta \Delta C_T = \Delta C_{T \text{ Experiment}} - \Delta C_{T \text{ Control}}$
3.  $RTL \text{ ratio} = 2^{-\Delta \Delta C_T}$

## References

1. Xiong L, Xie J, Song C, Liu J, Zheng J, Liu C, et al. The activation of *Nrf2* and its downstream regulated genes mediates the antioxidative activities of xueshuan xinmaining tablet in human umbilical vein endothelial cells. *Evid Based Comple Alternat Med*. 2015; 2015: 187265.
2. Gourronc FA, Robertson MM, Herrig AK, Lansdorp PM, Goldman FD, Klingelutz AJ. Proliferative defects in dyskeratosis congenita skin keratinocytes are corrected by expression of the telomerase reverse transcriptase, TERT, or by activation of endogenous telomerase through expression of papillomavirus E6/E7 or the telomerase RNA component, TERC. *Exp Dermatol*. 2010; 19: 279-288.
3. Cawthon RM. Telomere measurement by quantitative PCR. *Nucleic Acids Res*. 2002; 30: e47.