

## Supplementary material

**Table S1.** Relative mRNA expression of genes.

Gene	Gene ID	Relative mRNA expression ration versus control			P value
		NHDF /NHEK treated with OdLe 0.5µg/ml	NHDF/NHEK treated with UVA irradiation	NHDF/NHEK treated with UVA irradiation and OdLe 0.5µg/ml	
INHBA	3624	1,104830868	1,062833434	1,457237	0.05
OCLN	100506658	1,604012814	0,611515564	1,604530	<0.05
KLK7	5650	0,914961012	1,121626665	1,506556	0.05
UGCG	7357	1,117272316	1,051485902	2,009714	0.05
GBA1	2629	1,059501314	1,082324154	2,048326	0.05
CDSN	1041	1,126131501	1,151772818	1,554953	0.05
CD44	960	1,185017824	1,013537015	1,397923	0.05
COL3A1	1281	2,209398891	1,092896166	3,256626	0.05
FOXO3	2309	2,086426039	0,896079594	1,367389	0.05
MMP14	4323	1,882440673	0,855582899	5,885722	<0.05
SIRT1	23411	1,581721763	1,325760925	3,766153	<0.05
SIRT2	22933	1,567952038	0,945430748	3,375954	<0.05

**Table S2.** Gene name, Accesion No, Kegg pathway, Primer.

Gene Symbol	Gene Name	Accession No	Kegg pathway	Primmer F (5'-3')	Primmer R (5'-3')
INHBA	inhibin subunit beta A	<a href="#">NM_002192.4</a>	<a href="#">map04350</a>	GCAGAAGTCTGGCTCTTCTTA A	CCCCTCCTCTTCTTTCTCTTC
OCLN	Occludin	<a href="#">NM_001205254.2</a>	<a href="#">map04670</a>	TTTGCTGTGAAACTCGAAG AA	CGCCAGTTGTGTAGTCTGTCT C
KLK7	kallikrein related peptidase 7	<a href="#">NM_001207053.2</a>		ATCCATGGTGAAGAAAGTCA GG	TTGAGTGTAGACTCCTGGGTC A
UGCG	UDP-glucose ceramide glycosyltransferase	<a href="#">NM_003358.3</a>	<a href="#">map00600</a>	TCCCAAATATGAAGTGCTCCT T	TTCTGTACACATTGAAAC C
GBA1	b-glycocerebrosidase	<a href="#">NM_000157.4</a>	<a href="#">map00600</a>	GCTCAAGATACCCCTGATTC AC	CGGACATTGTGGTGAGTACTG T
CDSN	Corneodesmosin	<a href="#">NM_001264.5</a>		CTCTTCCTCTTCCAGACCTTT	TGAAGTAGCCACAGGGTAG AT

SIRT1	sirtuin 1	<a href="#">NM_001142498.1</a>	<a href="#">hsa04068</a>	GGAGCAGATTAGTAGGCGGCTT	GCGCCATGGAAAATGTAACG
SIRT2	sirtuin 2	<a href="#">NM_001193286.1</a>	<a href="#">hsa04068</a>	TGACGCCCAAGTGTGAAGACT	ATACAGGAGAAGAAACGCGCTG
FOXO3	forkhead box O3	<a href="#">NM_001455.3</a>		CAGGCACCATGAATCTGAATGA	GGAGCGTGATGTTATCCAGCA
CD44	CD44 molecule	<a href="#">NM_000610.3</a>	<a href="#">hsa04512</a>	TCATCTTGGCATCCCTCTTG	CCATTGCCACTGTTGATCACTA
COL3A1	collagen, type III, alpha 1	NM_000090.4	<a href="#">hsa04512</a>	GGAGTTTAGAAGTGCGCCATTC	CCAAAAGCTGTAAGCGTTTGC
MMP14	matrix metalloproteinase 14	<a href="#">NM_004995.4</a>	<a href="#">hsa04668</a>	ACGACGTCTTCCAGTACCGAGA	TAGGTCACGTAGCCCACTTGGT
ACTB	actin, beta	<a href="#">NM_003254.2</a>	<a href="#">hsa04066</a>	TTTATCCATCCCCTGCAAAC G	TTTTCAGAGCCTTGGAGGAGC
GAPDH	glyceraldehyde-3-phosphate dehydrogenase	<a href="#">NM_001101.3</a>	<a href="#">hsa04810</a>	CTGTCCACCTTCCAGCAGATG T	AGCATTGCGGTGGACGAT