

Supplemental Tables

ANTI-AGING POTENTIALS OF METHYLENE BLUE FOR HUMAN SKIN LONGEVITY

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Supplemental Table 1. Information for Human Fibroblast Cell Lines

Cell line (Name in paper)	Passage Number (Starting → Ending)	Gender	Donor Age	Race	Resource
HGFDFN168 (Normal)	P12 → P18	Male	40 yrs 5 mos	Caucasian	PRF *
HGADFN167 (HGPS)	P12 → P18	Male	8 yrs 5 mos	Caucasian	PRF
AG09266 (1-YM)	P13 → P19	Male	26 yrs	Caucasian	Coriell**
AG08434 (2-YF)	P13 → P19	Female	29 yrs	Caucasian	Coriell
AG11695 (3-OM)	P13 → P19	Male	82 yrs	Caucasian	Coriell
AG11725 (4-OF)	P13 → P18	Female	84 yrs	Caucasian	Coriell

1-YM: 1-Young Male
3-OM: 3-Old Male

2-YF: 2-Young Female
4-OF: 4-Old Female

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**Coriell Institute for Medical Research

Supplemental Table 2. Information for Four Antioxidants

Name	Solubility	Concentration
N-Acetyl-L-cysteine (NAC)	Water	1 mM
MitoQ	Lipid	100 nM
MitoTEMPO (mTEM)	Water	100 nM
Methylene Blue (MB)	Water/Lipid	100 nM

Supplemental Table 3. Primer sequences used for quantitative real-time PCR analysis

Gene	Forward Primer (5'→3')	Reverse Primer (5'→3')
<i>ELN (Elastin)</i>	TCTGAGGTTCCCATAGGTTAGGG	CTAAGCCTGCAGCAGCTCCT
<i>NFE2L2 (Nrf2)</i>	AGTGGATCTGCCAACTACTC	CATCTACAAACGGGAATGTCTG
<i>GCLC</i>	CAAGAGAAGGGGGAAAGGAC	GACCTCGGGCAGTGTGAAC
<i>GCLM</i>	TCAGGGAGTTTCCAGATGTC	CAATAGGAGGTGAAGCAATG
<i>GPX7</i>	ACTTCAAGGCGGTCAACATC	GGCAAAGCTCTCAATCTCC
<i>GSR</i>	CCCAAGCCCACAATAGAGG	ACCTGCACCAACAATGACG
<i>GSTM1</i>	GCATGATCTGCTACAATCC	CTTGGGCTCAAATATACGG
<i>GSTM4</i>	CCTTGCTCCCTGAACACTC	GTCGTCACTTCCAACCAAC
<i>HO1</i>	AAGACTGCGTTCCTGCTCAAC	AAAGCCCTACAGCAACTGTCTG
<i>NQO1</i>	GGCATTCTGCATTTCTGTG	GGCGTTTCTTCCATCCTTC
<i>TALDO</i>	GGGCCGAGTATCCACAGAAG	GGCGAAGGAGAAGAGTAACG
<i>TBP</i>	CGCCAGCTTCGGAGAGTTC	ACAACCAAGATTCACTGTGGATACA
<i>β-actin</i>	CTGGAACGGTGAAGGTGACA	AAGGGACTTCCTGTAACAATGCA

Supplemental Table 4. Gene ontology and pathway analysis showing enrichment of differentially expressed gene clusters in HGPS cells upon MB treatment

