

Supporting Information

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Hydroxytyrosol-1-glucoopyranoside alleviates senescence via Nrf2 and AMPK signaling pathway

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Table S1: Strains used in this study

Strain	Description	Source
BW25113	$\Delta rhaBADLD78$, $\Delta araBADAH33$, $\Delta lacZWJ16$ <i>hsdR514</i> <i>rrmBT14</i>	Coli Genome Stock Center
HTG01	BW25113, pZE-UGT85A1 and pCS-pgm-galU	This study
HTG02	BW25113, pZE-UGT85A1-pgm-galU	This study
HTG03	BW25113, pCS-UGT85A1-pgm-galU	This study

Table S2: Plasmids used in this study

Plasmid	Description	Source
pZE12-luc	PLlacO1, <i>AmpR</i>	Ref. 20
pCS27	PLlacO1, <i>KanR</i>	Ref. 20
pZE-UGT85A1	pZE12-luc, <i>UGT85A1</i> from <i>A. thaliana</i>	This study
pCS-pgm-galU	pCS27, <i>pgm</i> and <i>galU</i> from <i>E. coli</i>	This study
pZE-UGT85A1-pgm-galU	pZE12-luc, <i>UGT85A1</i> from <i>A. thaliana</i> , <i>pgm</i> and <i>galU</i> from <i>E. coli</i> , two operons	This study
pCS-UGT85A1-pgm-galU	pCS27, <i>UGT85A1</i> from <i>A. thaliana</i> , <i>pgm</i> and <i>galU</i> from <i>E. coli</i> , two operons	This study

Table S3: Parameters of macroporous resins used for HTG purification

Types	Polar	Specific Surface Area (m²/g)
HPD-300	Non-polar	800-870
SP207	Weak polar	930
SP825L	Weak polar	1000
AB-8	Weak polar	480-520
HPD-600	Polar	550-600

Table S4: Primers designed for qRT-PCR

Primers	Primer sequence
P53-F	CAGCACATGACGGAGGTTGT
P53-R	TCATCCAAATACTCCACACGC
P21-F	TGTCCGTCAGAACCCATGC
P21-R	AAAGTCGAAGTTCCATCGCTC
IL-6-F	ACTCACCTCTTCAGAACGAATTG
IL-6-R	CCATCTTTGGAAGGTTTCAGGTTG
IL-8-F	TTTTGCCAAGGAGTGCTAAAGA
IL-8-R	AACCCTCTGCACCCAGTTTTTC
IL-1 α -F	TGGTAGTAGCAACCAACGGGA
IL-1 α -R	ACTTTGATTGAGGGCGTCATTC
IL-1 β -F	AGCTACGAATCTCCGACCAC
IL-1 β -R	CGTTATCCCATGTGTCGAAGAA
CXCL1-F	ACCGAAGTCATAGCCCACTC
CXCL1-R	CTCCGTTACTTGGGGACACC
CXCL2-F	CAGCCAGATGCAATCAATGCC
CXCL2-R	TGGAATCCTGAACCCACTTCT
β -Actin-F	AGCGAGCATCCCCAAAGTT
β -Actin-R	GGGCACGAAGGCTCATCATT