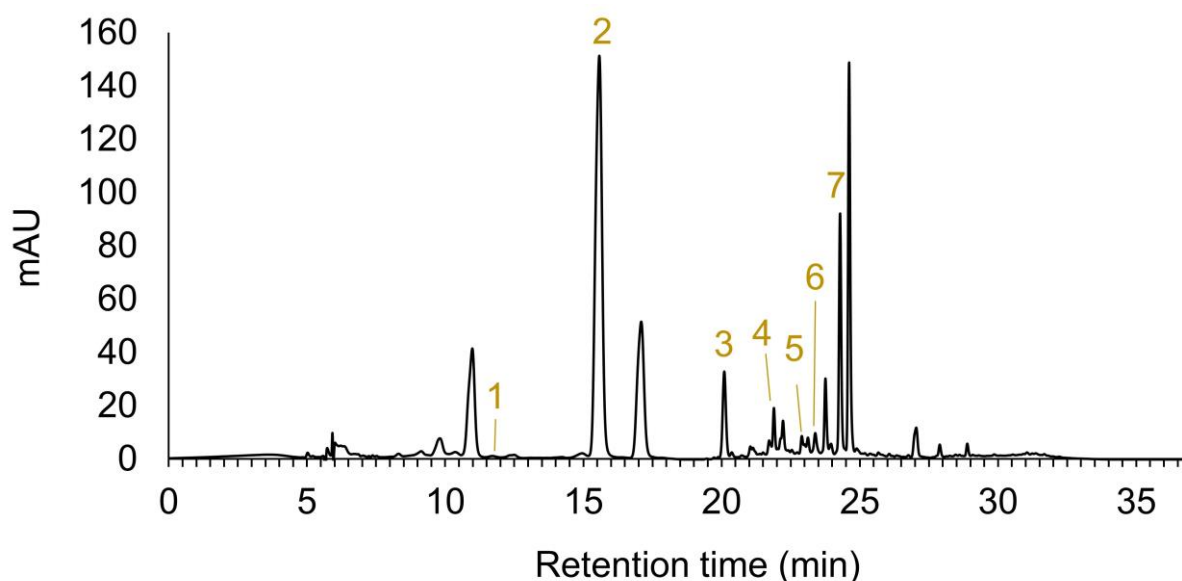


## SUPPORTING INFORMATION

### Figures



**Figure S1** HPLC chromatogram of phenolic compounds for *S. pygmaea* extract at 320 nm with their retention times. AME: 1-Protocatechuic acid (11.8 min), 2- Chlorogenic acid (15.7 min), 3- Caffeic acid (20.1 min), 4- Rutin (22.0 min), 5- Quercetin 3- $\beta$ -D-glucoside (22.9 min), 6- *p*-Coumaric acid (23.4 min), 7- Ferulic acid (24.3 min).

### Tables

**Table S1** Primer sequences for selected genes. The table provides the primer sequences, lengths, melting temperatures ( $T_m$ ), and GC content (%) used in the qRT-PCR analysis.

Gene		Primer sequence (5'-3')	Length	$T_m$	GC (%)
TP53	F	GTTTCCGTCTGGGCTTCTT	19	57.68	52.63
	R	GCAGGTCTTGCCAGTT	17	56.98	58.82
CDKN1A	F	GGAGACTCTCAGGGTCGAAA	20	58.45	55.00
	R	GCTTCCTCTTGGAGAAGATCAG	22	58.20	50.00
WEE1	F	CGCCACACAAGACCTTCC	18	58.34	61.11
	R	GGAGTTTAACAGAGCTGGAATCA	23	58.42	43.48
CCNA2	F	AGAGGCCGAAGACGAGA	17	56.73	58.82
	R	AGGCTGTTTACTGTTTGTCTTTC	22	57.69	40.91
CCNB1	F	TGGTAACAAAGTCAGTGAACAA	22	56.07	36.36
	R	TTTCCAGTAGCTGAAGGTTT	20	54.47	40.00
CDK1	F	TCTATTAAGGAACTTCGTCATCCA	25	57.82	36.00
	R	ATCCATGGAAAGAACTCAAAGAT	24	56.57	33.33
CDC25A	F	CAACCTGACCGTCACTATGG	20	57.99	55.00
	R	CTGCAGATTACTGTTGTCTTCAC	24	58.32	41.67
CDC25C	F	GTCTGTCCAGATGTCCCTAGA	21	57.98	52.38
	R	GGTAAGCTGAGTGGCAGTTATC	22	58.80	50.00
ACTB	F	CACTCTTCCAGCCTTCCTTC	20	57.89	55.00
	R	GTACAGGTCTTTGCGGATGT	20	57.91	50.00

**Table S2** PCR reaction mix components and volumes.

<b>Reaction mix components for a single reaction</b>	<b>Volume (<math>\mu</math>l)</b>
H <sub>2</sub> O (PCR grade)	5.8
Forward primer (F) (from 10 $\mu$ M solution)	0.6
Reverse primer (R) (from 10 $\mu$ M solution)	0.6
Enzyme mix (LightCycler <sup>®</sup> 480 SYBR Green I Master)	10
cDNA (1:10 diluted)	3
Total reaction volume	20

**Table S3** PCR Temperature and Duration Conditions.

<b>Program</b>	<b>Preincubation</b>		<b>Amplification</b>		<b>Cooling</b>
<b>Analysis mode</b>	-		Quantification mode		-
<b>Cycle #</b>	1		45		1
<b>Target temperature (<math>^{\circ}</math>C)</b>	95	95	57	72	4
<b>Period (s)</b>	00:05:00	00:00:10	00:00:15	00:00:10	00:00:30
<b>Ramp rate (<math>^{\circ}</math>C/s)</b>	4.8	4.8	2.5	4.8	2.5