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Supplementary Material for:

**Extra Virgin Olive Oil Extracts of Indigenous Southern Tuscany Cultivar Act as Anti-inflammatory and Vasorelaxant Nutraceuticals**

Luca Pozzetti <sup>1</sup>, Francesca Ferrara <sup>2</sup>, Ludovica Marotta <sup>1</sup>, Sandra Gemma <sup>1</sup>, Stefania Butini <sup>1</sup>, Mascia Benedusi <sup>2</sup>, Fabio Fusi <sup>1</sup>, Amer Ahmed <sup>3</sup>, Serena Pomponi <sup>4</sup>, Stefano Ferrari <sup>5</sup>, Matteo Perini <sup>6</sup>, Anna Ramunno <sup>7</sup>, Giacomo Pepe <sup>7</sup>, Pietro Campiglia <sup>7</sup>, Giuseppe Valacchi <sup>8,9,10</sup>, Gabriele Carullo <sup>1,\*</sup> and Giuseppe Campiani <sup>1,\*</sup>

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**Table S1.** Primer sequences

Gene	Forward sequence	Reverse sequence
GPx1	CAACCAGTTTGGGCATCAG	TCTCGAAGAGCATGAAGTTGG
NQO1	CTGATCGTACTGGCTCACTC	AACAGACTCGGCAGGATAC
IL-6	TAGGACTGGAGATGTCTGAGGCT	GACCGAAGGCGCTTGTGGA
COX-2	TTCAAATGAGATTGTGGAAAATT	ATATCATCTCTGCCTGAGTATCTT
$\beta$ -actin	ATTGCCGACAGGATGCAGA	AGTACTTGCGCTCAGGAGGA

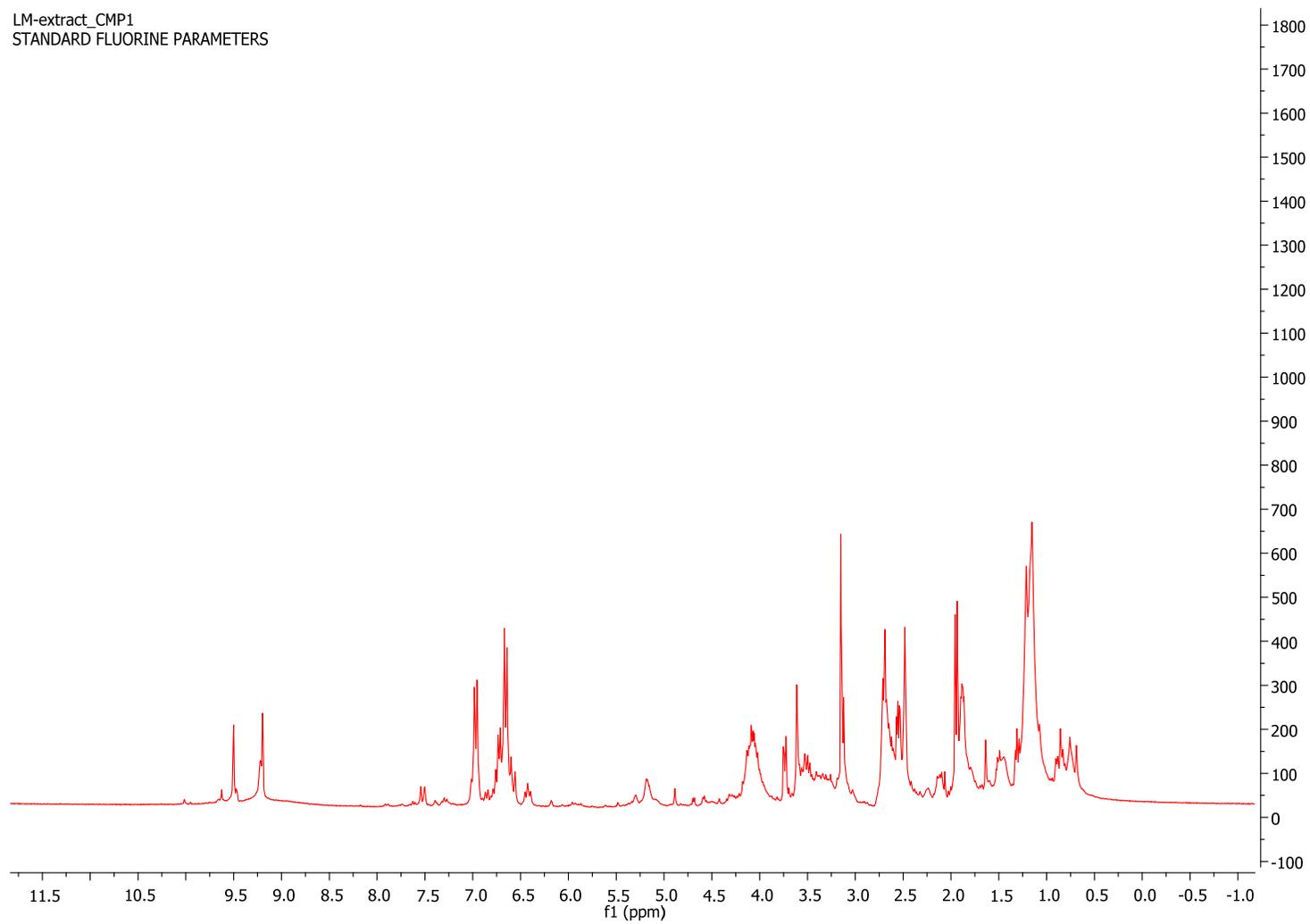
**Figure S1. Representative  $^1\text{H}$ -NMR spectrum of OE\_15**

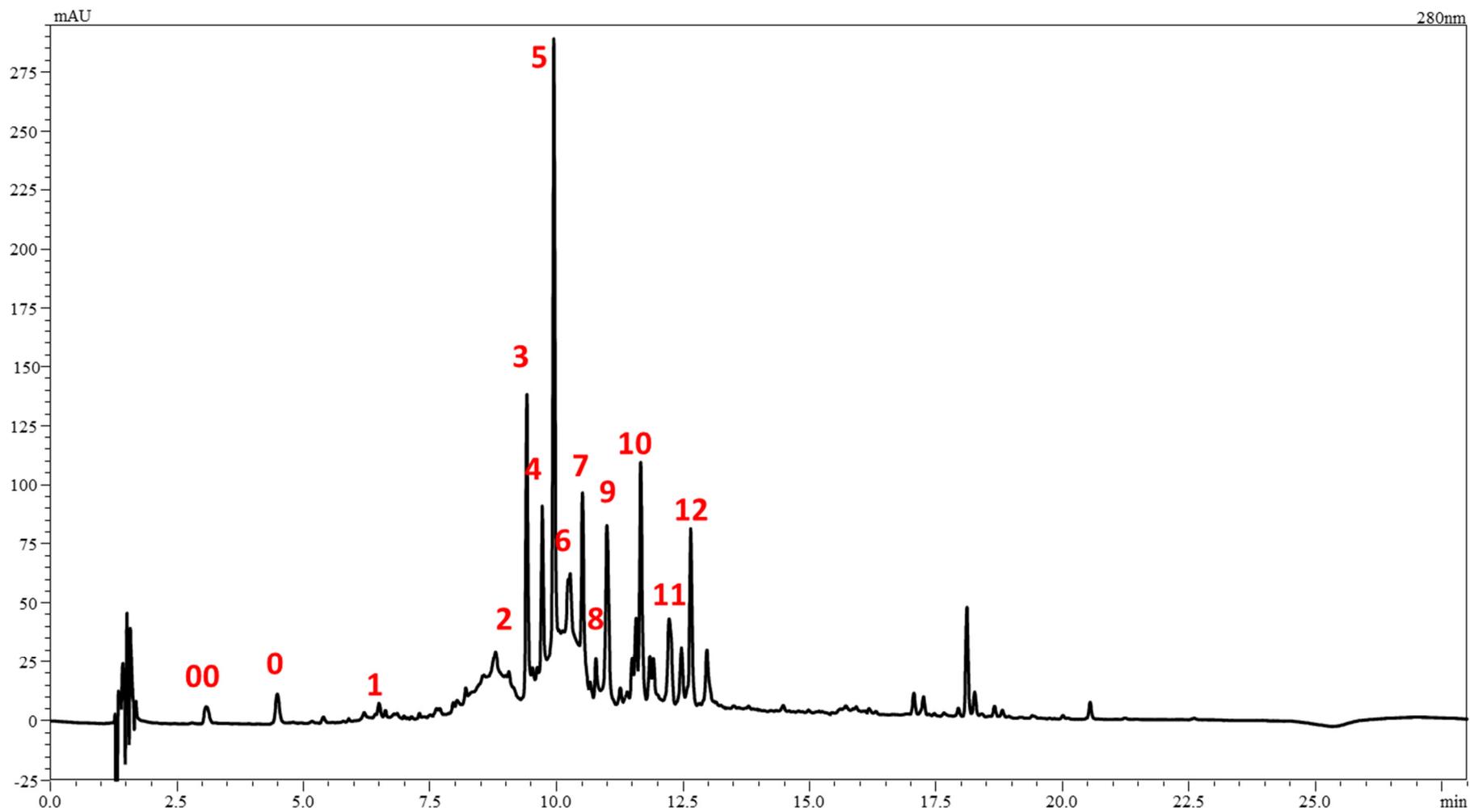
Figure S2. OE\_05  $\lambda$ :280 nm

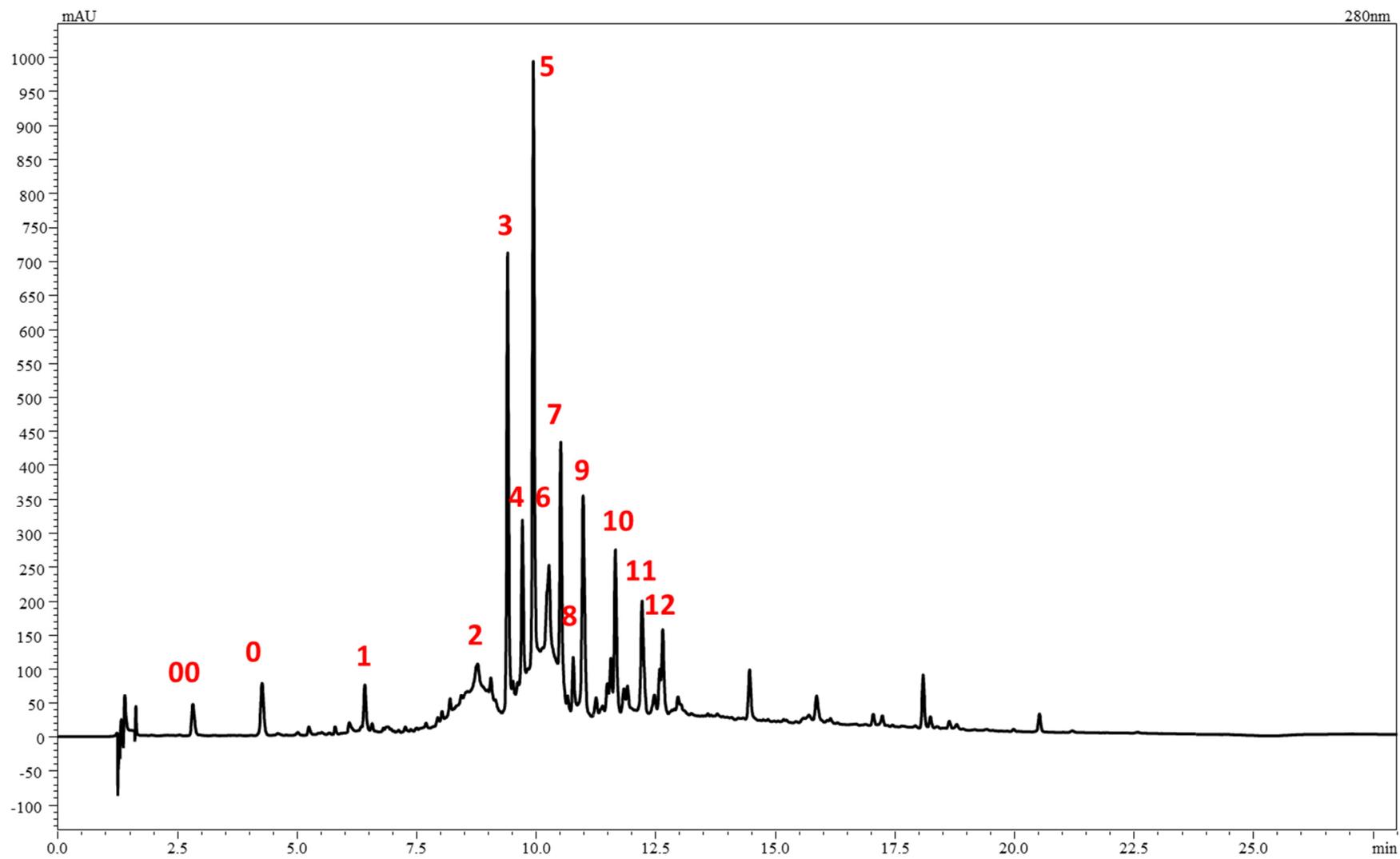
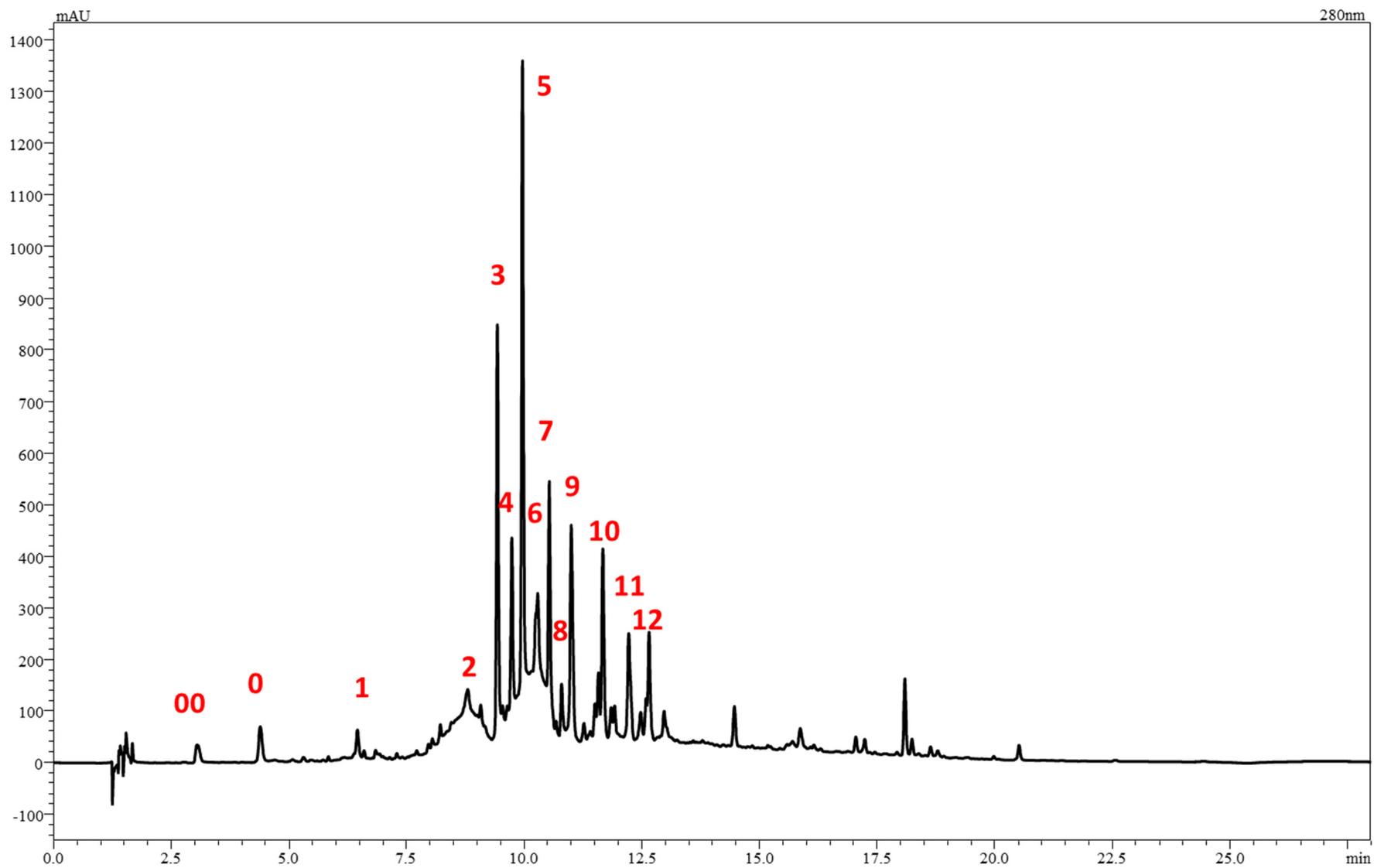
Figure S3. OE\_10  $\lambda$ :280 nm

Figure S4. OE\_15  $\lambda$ :280 nm

**Table S2.** Method validation parameters for quantitation by RP-UHPLC-PDA of flavones in olive oil extracts

Parameters		Luteolin		Apigenin	
<b>Retention time (min) (n = 4)</b>		9.41 ± 0.01		10.51 ± 0.01	
<b>Regression equation</b>		y = 0.000036x + 0.059537		y = 0.000029x - 0.159557	
<b>Correlation coefficient (R<sup>2</sup>)</b>		≥ 0.9999		≥ 0.9999	
<b>LOD (µM)</b>		0.06		0.01	
<b>LOQ (µM)</b>		0.17		0.04	
	Analyte concentration (µM)	RSD (%)	Accuracy (%)	RSD (%)	Accuracy (%)
<b>Intraday</b>	10	0.2%	99.7%	0.1%	102.1%
	20	0.4%	98.7%	0.1%	100.9%
	<b>(n = 3)</b>	50	0.2%	98.7%	0.1%
<b>Interday</b>	10	0.4%	98.8%	0.2%	100.9%
	20	0.1%	98.9%	0.1%	101.4%
	<b>(n = 3)</b>	50	0.2%	98.8%	0.1%
<p>Y: concentration of tested compounds; X: peak area at 330 nm            LOQ: 10 × standard deviation of the response/slope of calibration curve            LOD: 3.3 × standard deviation of the response/slope of calibration curve</p>					

Extract	Luteolin (mg/g)	Apigenin (mg/g)
OE_05	0.53 ± 0.01	0.24 ± 0.01
OE_10	0.42 ± 0.01	0.17 ± 0.01
OE_15	1.99 ± 0.06	0.82 ± 0.03

