

**SUPPLEMENTARY MATERIAL, File 1**

For the manuscript

**Inclusion of the Phytoalexin *trans*-Resveratrol in Native Cyclodextrins: A**

**Thermal, Spectroscopic, and X-Ray Structural Study**

Laura Catenacci, Milena Sorrenti, Maria Cristina Bonferoni, Lee Hunt and Mino R. Caira

**Table S1.** Solvents and volumes used in the recrystallizations of commercial RSV with thermal data from DSC of samples isolated. (Standard deviation in parentheses ( $n = 3$ )).

Solvent	mL per 1 g <sub>RSV</sub>	T <sub>onset,m</sub> (°C)	T <sub>peak,m</sub> (°C)	H <sub>m</sub> J g <sup>-1</sup>
Water	2.8·10 <sup>3</sup>	262(2)	263(2)	265(8)
Methanol	17	262(1)	264(1)	237(6)
Methanol/water 7:3 ( <i>v/v</i> )	23	263(2)	265(3)	265(9)
Ethanol	15	262(1)	264(1)	269(7)
Ethanol/water 1:1 ( <i>v/v</i> )	9	263(1)	265(1)	314(8)
Ethanol/water 4:1 ( <i>v/v</i> )	5	263(2)	266(1)	253(6)
Ethanol/water 7:3 ( <i>v/v</i> )	5	263(1)	264(2)	288(9)
Acetone	8	264(1)	265(2)	272(3)
Isopropanol	7	263(1)	265(1)	288(5)
n-propanol	7	261(3)	264(3)	272(4)
Tetrahydrofuran	4	263(2)	265(1)	274(5)
Methylene chloride	3.7·10 <sup>3</sup>	263(1)	265(2)	243(5)
Ethyl acetate	37	262(2)	264(2)	269(6)

**Table S2.** Peak assignments and integrations for host-guest stoichiometry.

Proton (CD/G) [Total no. of protons]	δ (ppm)	Peak integrations	Scale factor 8 x integration value	Experimental peak integral /theoretical proton. No.	Convert to integers
8 x H1 (CD) – [8]	4.88	1.000*	8	1	3
8 x O-H6(CD) –[8]	4.38	0.95	8	1	3
8 x O-H2(CD) –[8]; 8 x O-H3 (CD)–[8]	5.62	1.98	16	1	3
H10 and H14 (G) – [2]	6.36	0.33	2.6	1.3	4
H3 and H5 (G) – [2]	7.36	0.35	2.8	1.3	4

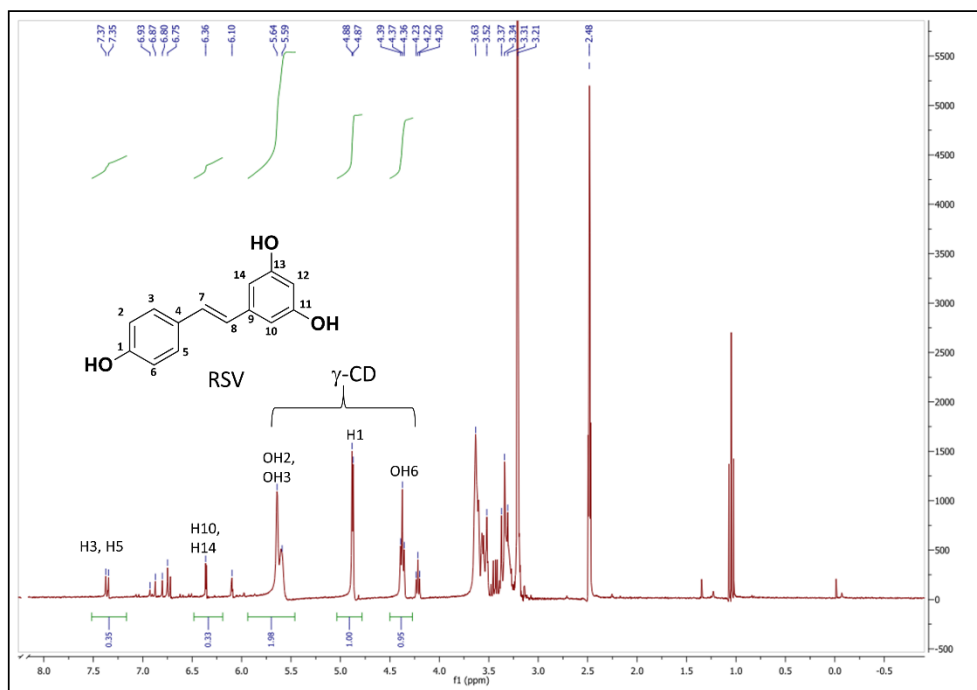


Figure S1.  $^1\text{H}$  NMR spectrum for  $\gamma$ -CD-RSV stoichiometry determination.

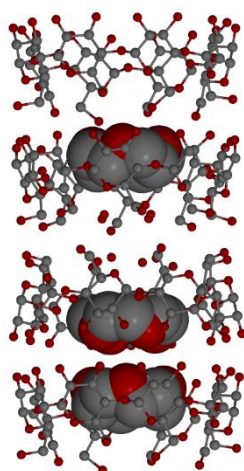
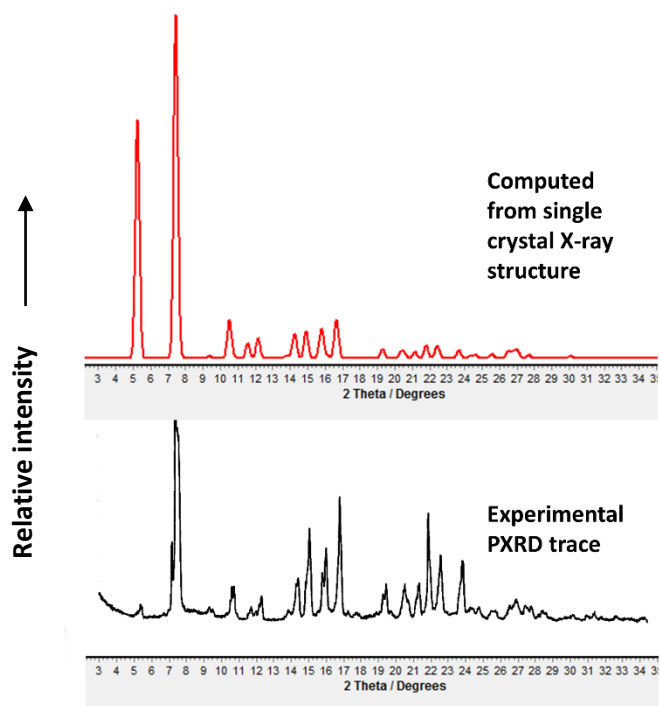


Figure S2. Inclusion of an ordered guest (12-crown-4) within the channel formed by  $\gamma$ -CD host molecules (CSD refcode DOCYID [31]).



**Figure S3.** The simulated and experimental PXRD patterns of the  $\gamma$ -CD-RSV hydrate complex.