Co-amorphous systems based on dihydroquercetin and L-lysine: synthesis and evaluation

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Supplementary Materials

1.1. ATR-FTIR

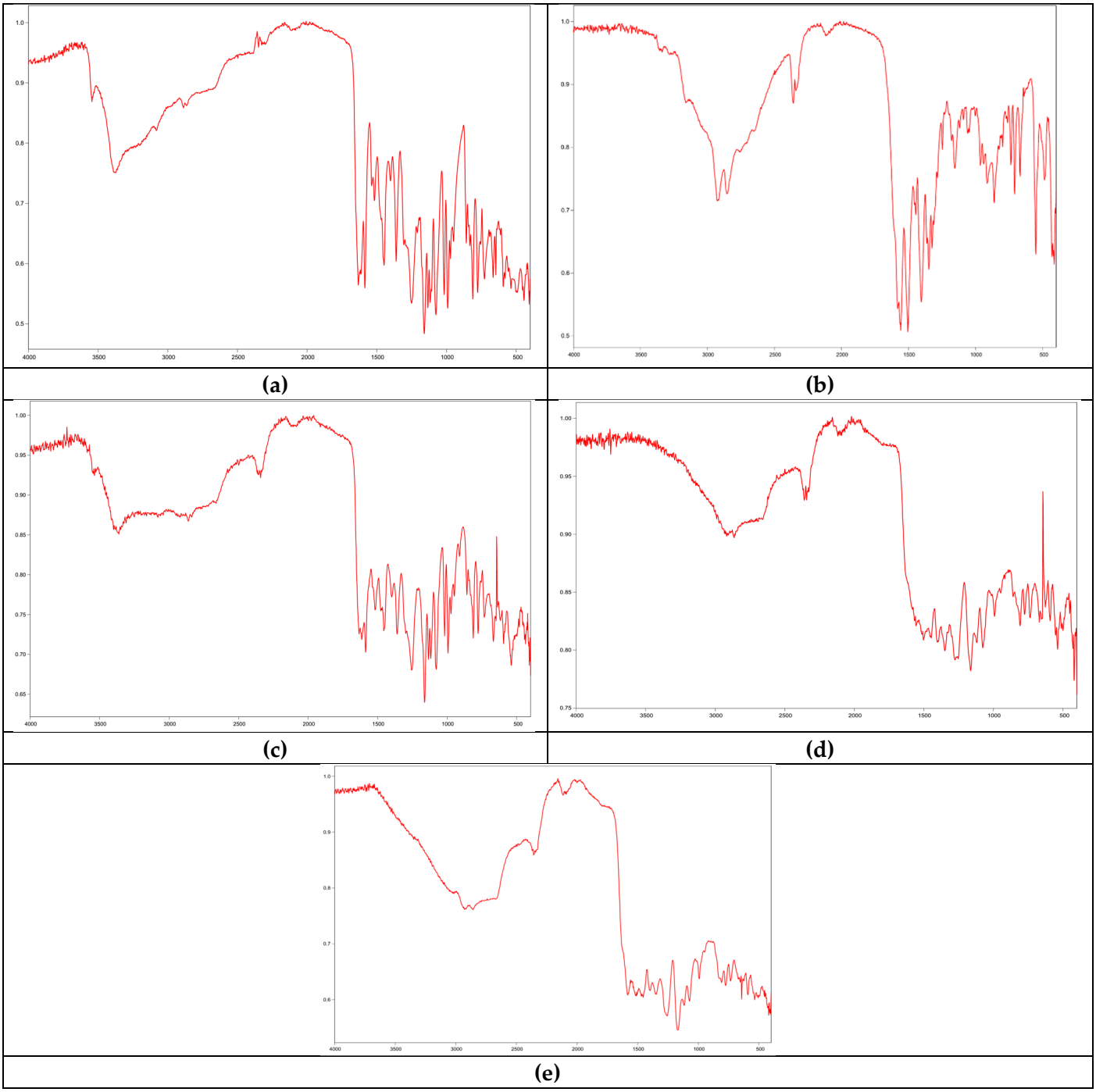


Figure S1. Attenuated total reflection Fourier transform infrared spectroscopy spectra of different samples: (**a**) dihydroquercetin raw substance; (**b**) L-lysine monohydrate raw substance; (**c**) mechanical mixture of dihydroquercetin and L-lysine; (**d**) lyophilizate of mechanical mixture of dihydroquercetin and L-lysine; (**e**) films of dihydroquercetin and L-lysine

1.2. Blank experiments

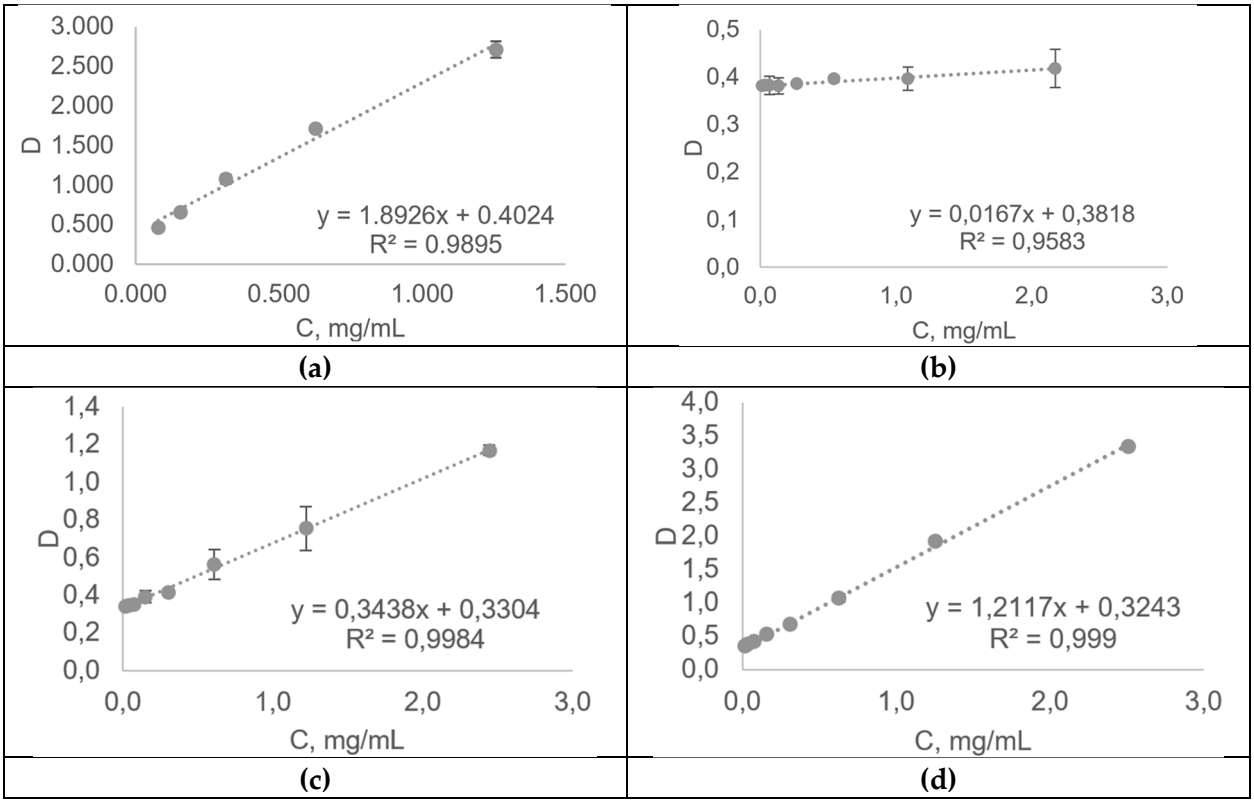
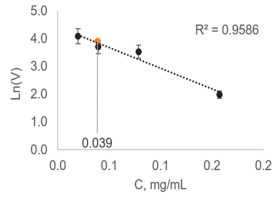
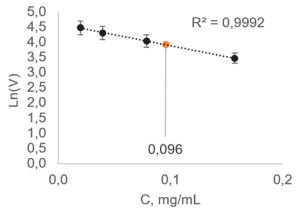
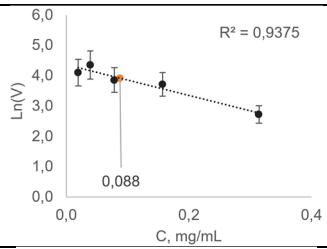
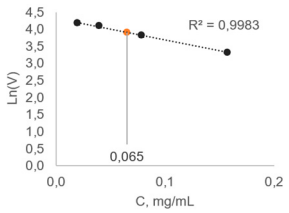
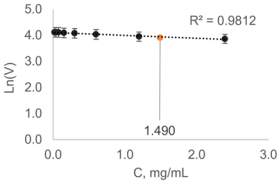
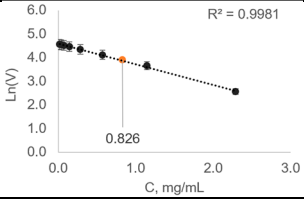
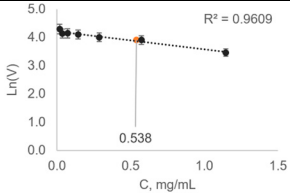
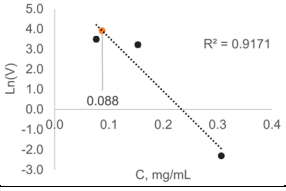
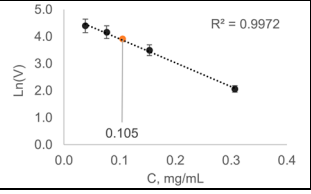
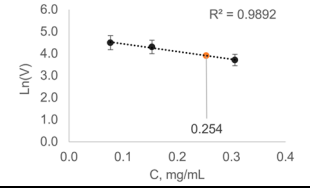
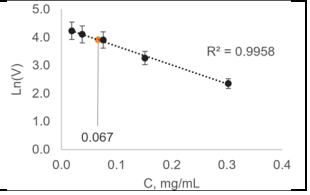


Figure S2. Dependence of the optical density of the CCK-8 solution upon addition of various concentrations of the samples: (**a**) dihydroquercetin raw substance; (**b**) L-lysine lyophilizate; (**c**) mechanical mixture of dihydroquercetin and L-lysine; (**d**) lyophilizate of mechanical mixture of dihydroquercetin and L-lysine

1.3. Cytotoxicity assessment

Samples	Cell lines			
	HEK293	3T3	HUVEC	Caco-2
DHQ_{raw}				
LYS_{lyo}		-		
DHQ/LYS_{mix}				

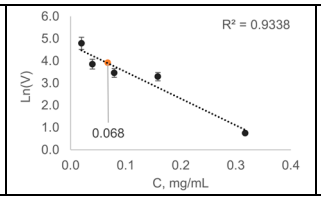
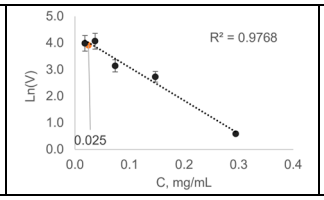
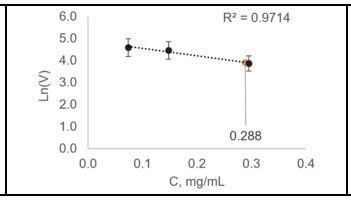
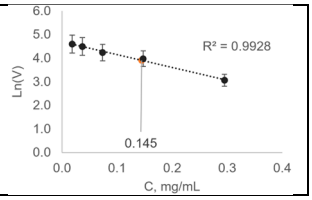
DHQ/LYS$_{lyo}$				

Figure S3. Dependence of cell survival for various cell lines. The orange dot indicates the IC50 value

1.4. HPLC analysis

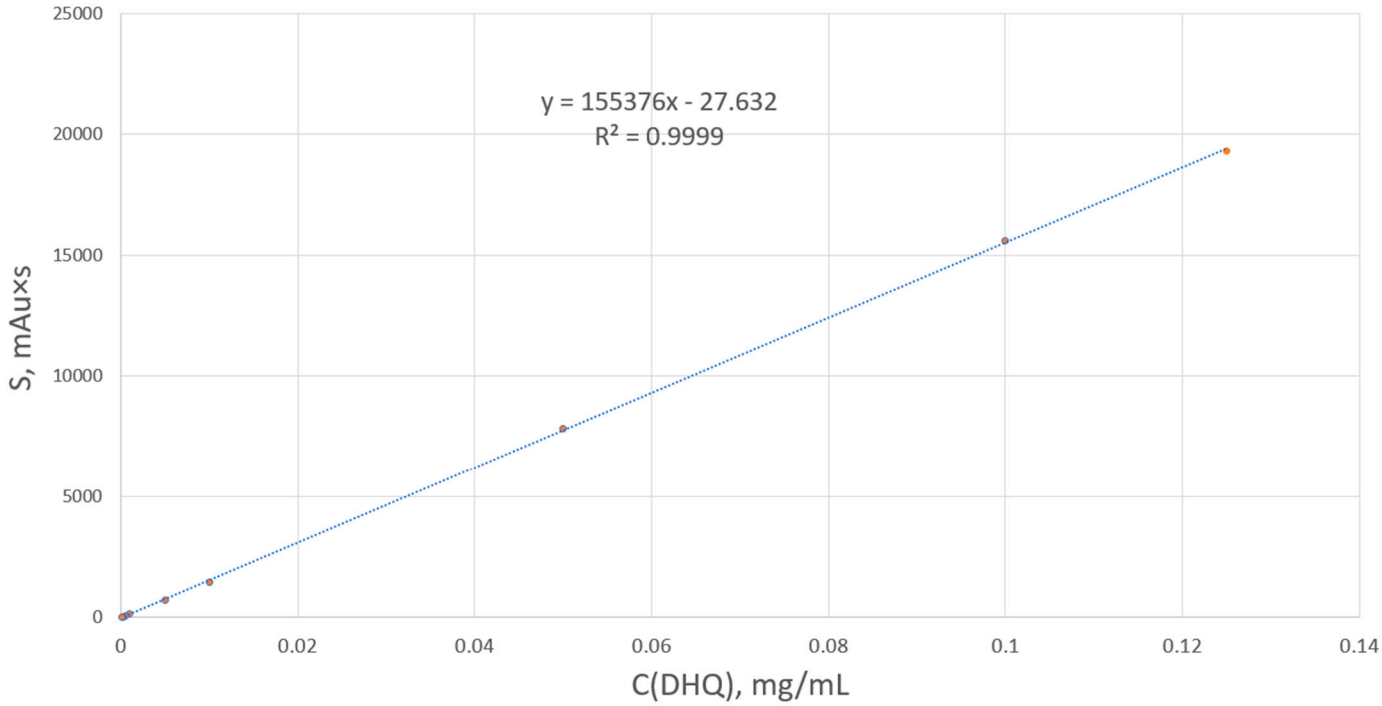


Figure S4. Calibration curve for dihydroquercetin

Table S1. Standard deviations and RSD for calibration curve for dihydroquercetin

C(DHQ), mg/mL	Average square (*n*=3), mAu×s	Standard deviation, mAu×s	RSD, %
0.12500	19304.0500	15.059490	0.078012
0.10000	15596.4200	55.755710	0.357491
0.05000	7811.6450	9.741954	0.124711
0.01000	1463.9390	2.859553	0.195333
0.00500	698.3798	0.749136	0.107268
0.00100	121.4150	1.920734	1.581957
0.00050	58.5554	1.055350	1.802310
0.00025	29.3423	0.479286	1.633433
0.00010	14.1327	0.163549	1.157241