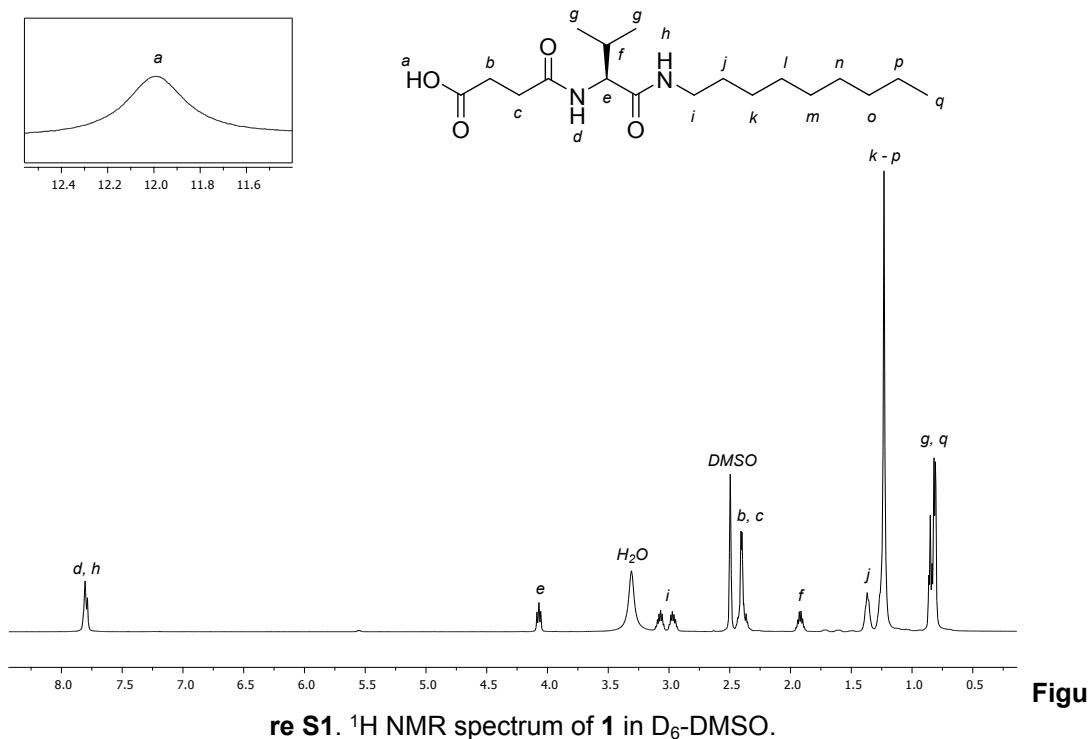


SUPPLEMENTARY MATERIAL

In between molecules and self-assembled fibrillar networks: Highly stable nanogel particles from a low molecular weight hydrogelator

Ana Torres-Martínez, César A. Angulo-Pachón, Francisco Galindo* and Juan F. Miravet*

1. NMR spectra



re S1. ^1H NMR spectrum of **1** in $\text{D}_6\text{-DMSO}$.

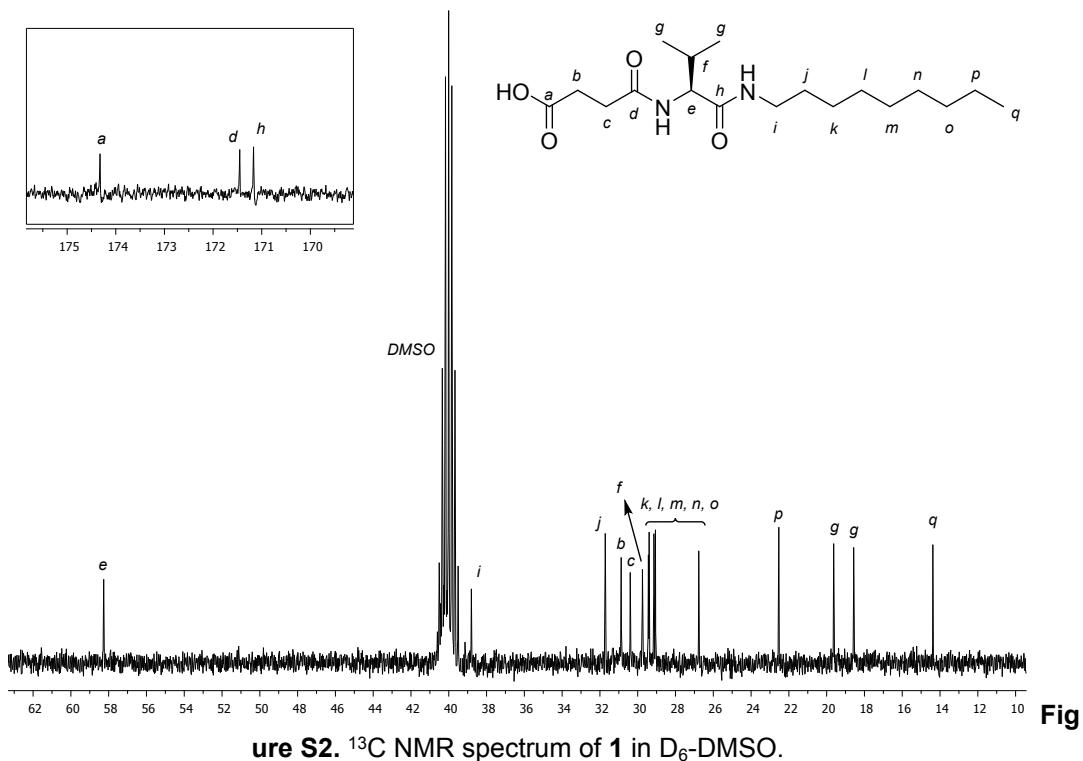


Figure S2. ^{13}C NMR spectrum of **1** in $\text{D}_6\text{-DMSO}$.

Fig

2. Determination of minimum gelation concentration (mgc)

Table S1. Minimum gelation concentration of compound **1** in different solvents.

Solvent	mgc	
	(mg/mL)	(mM)
Acetonitrile	6	18
Dicloromethane	6	18
Toluene	1	3
Water	5	16
Ethyl acetate	13	38
Chloroform		Soluble
Tetrahydrofurane		Soluble
Ethanol		Soluble
Methanol		Soluble

3. pKa determination

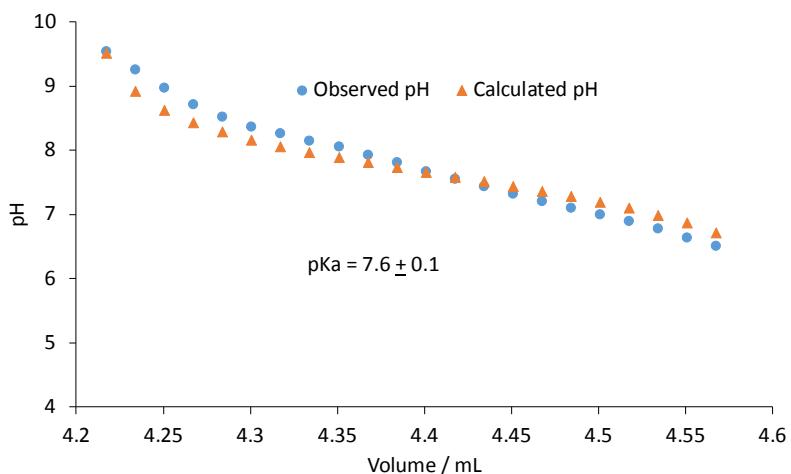


Figure S3. Calculated (Hyperquad) vs observed pH for the potentiometric titration of **1** with HCl 0.1M.

4. Dynamic light scattering

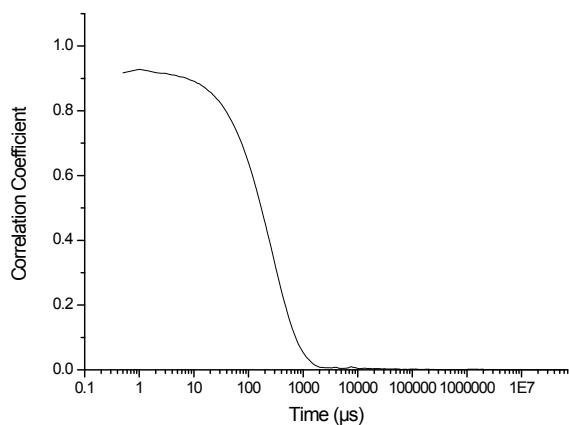


Figure S4. Correlation function of a representative DLS measurement of nanogel particles of **1** obtained from the xerogel from toluene.

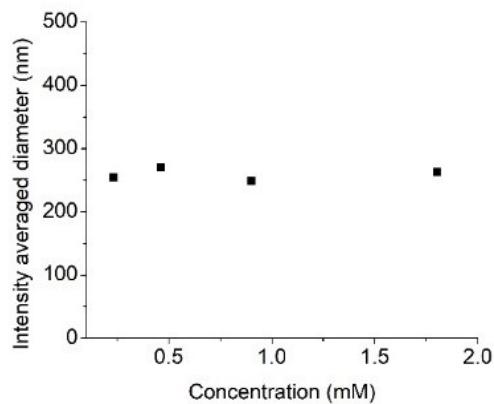


Figure S5. Influence of the concentration in the diameter of the nanoparticles formed by **1** in PBS.

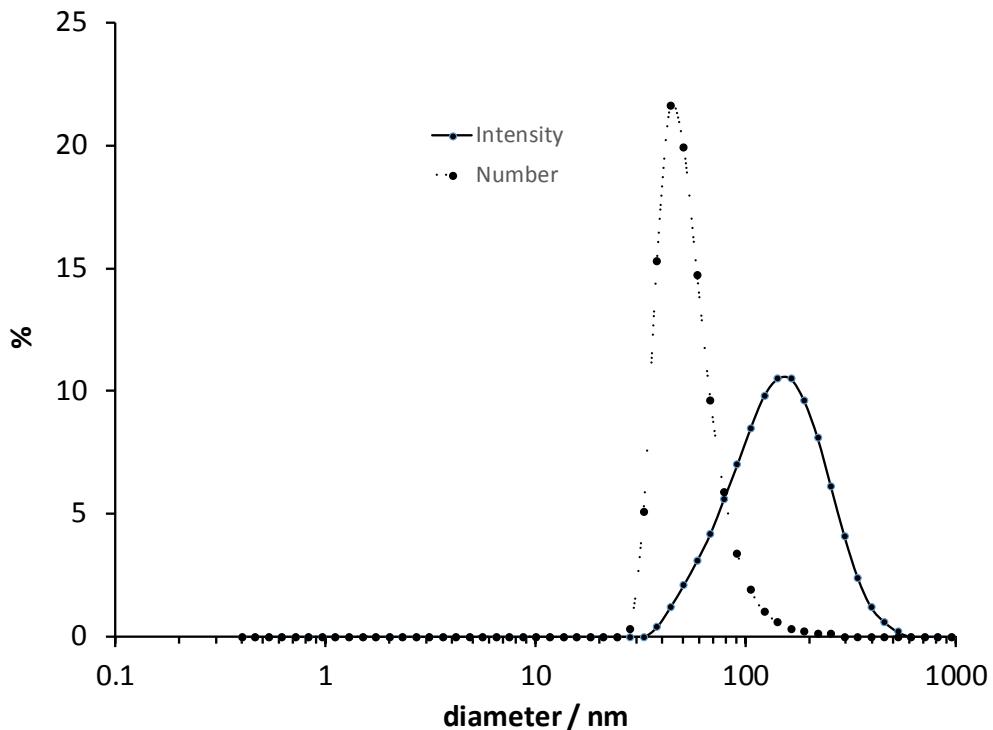


Figure S6. DLS analysis of size distribution by intensity (solid line) and by number (dash-dot line) of a representative sample of nanogel particles obtained from a xerogel from water.

5. Static light scattering

Table S2. Calculated concentration (mg mL^{-1}) of aggregated **1** in the samples used in SALS.^a

[1] _{total}	[1] _{ionized}	[1] _{free, neutral}	[1] _{nanoparticles}
0.274	0.026	0.075	0.173
0.377	0.036	0.075	0.266
0.480	0.046	0.075	0.359
0.582	0.055	0.075	0.452
0.685	0.065	0.075	0.545

^a[1]_{ionized} is calculated for a system with pH=6.4 and pKa=7.6; [1]_{free, neutral} corresponds to the cac value, 0.2 mM, 0.075 mg mL⁻¹

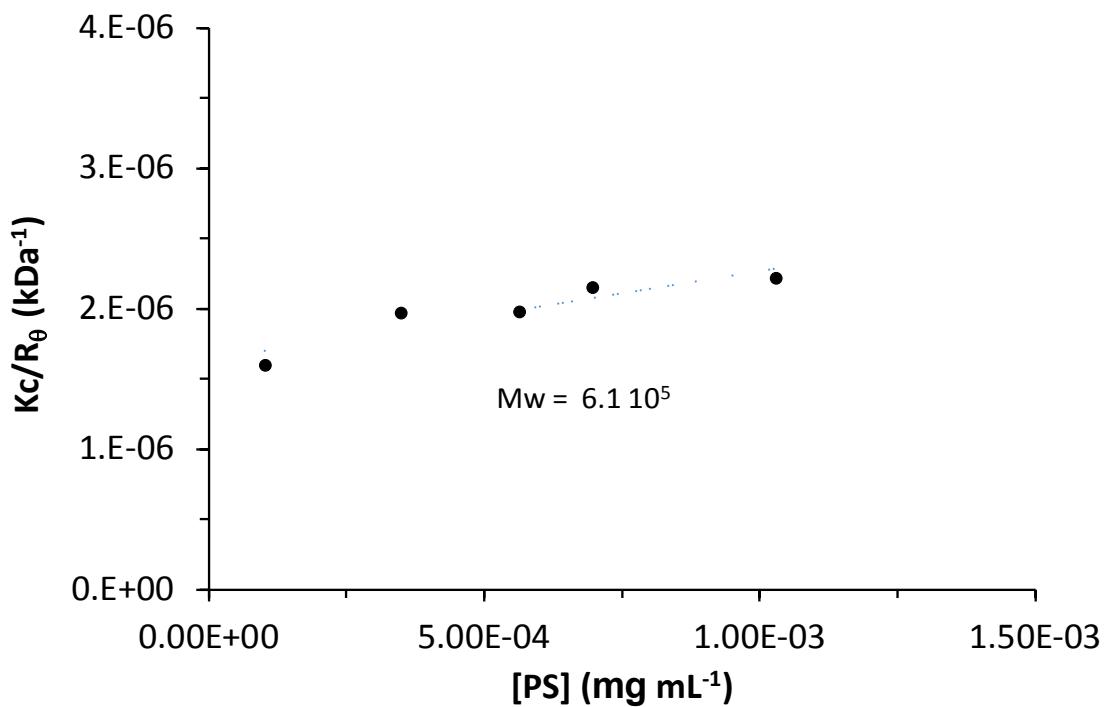


Figure S7. Debye plot for determination of M_w of standard polystyrene latex particles ($d= 100 \text{ nm}$).

6. Differential scanning calorimetry

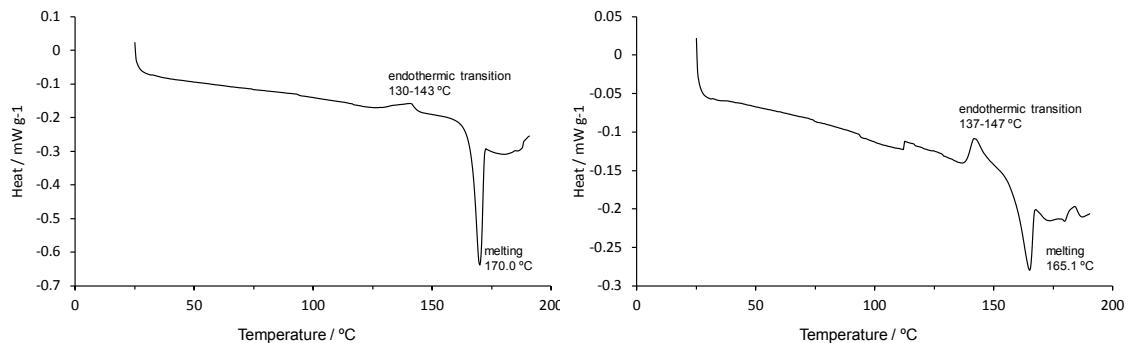


Figure S8. DSC traces of the xerogels from toluene (left) and water (right).