Supporting Information

Trehalose-8-hydroxyquinoline conjugates as antioxidant modulators of protein aggregation

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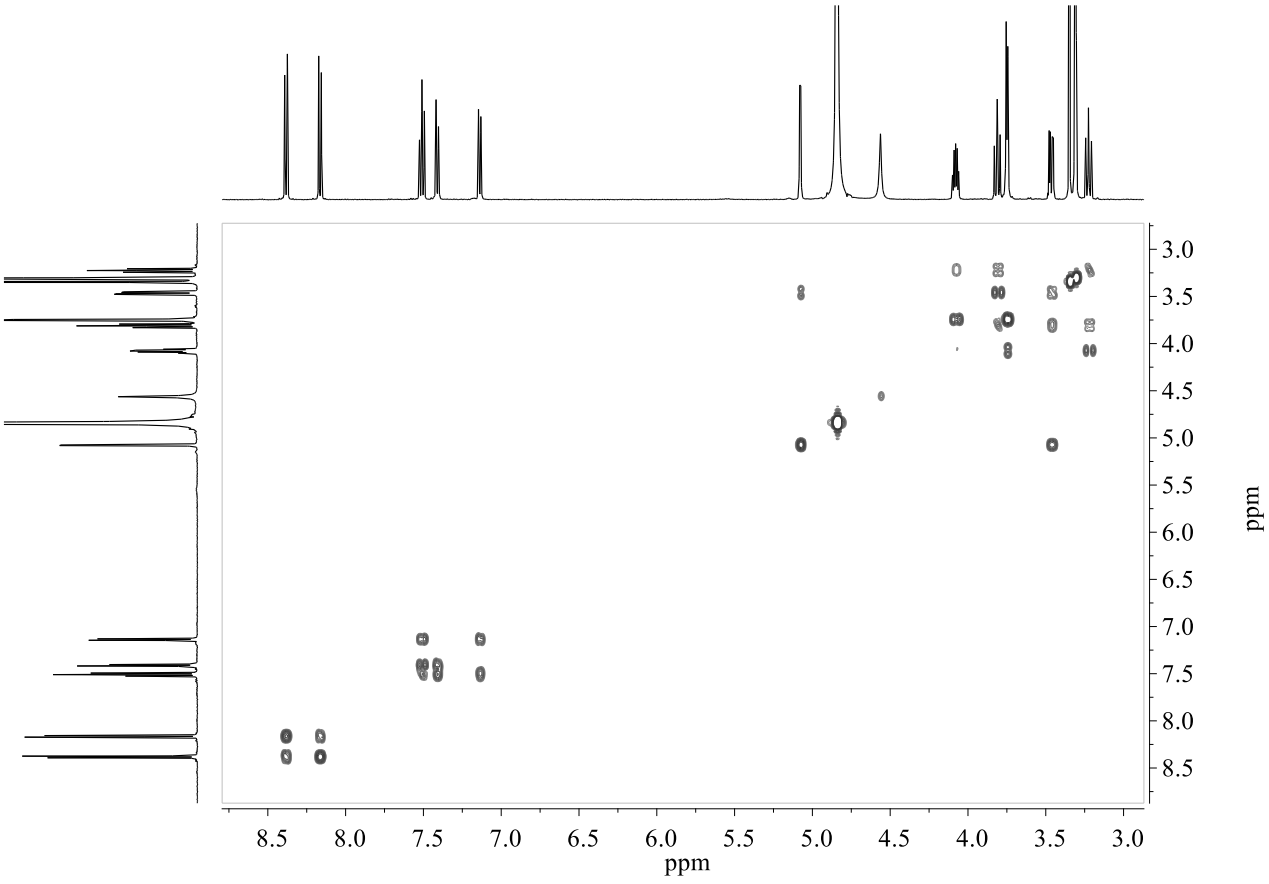

Figure S1. [1] COSY spectrum of Tre(HQ)$_2$ in CD$_3$OD at 500 MHz

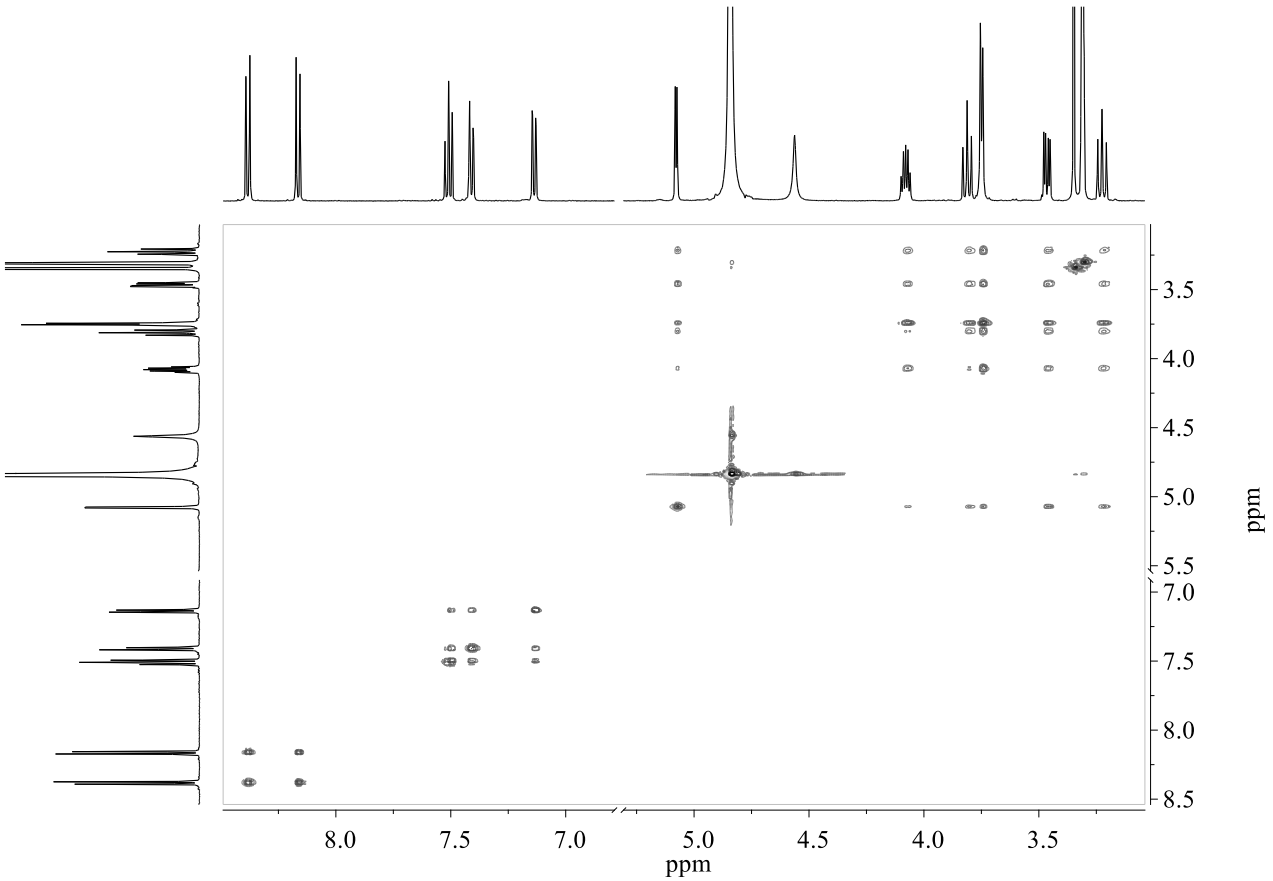

Figure S2. TOCSY spectrum of Tre(HQ)$_2$ in CD$_3$OD at 500 MHz.

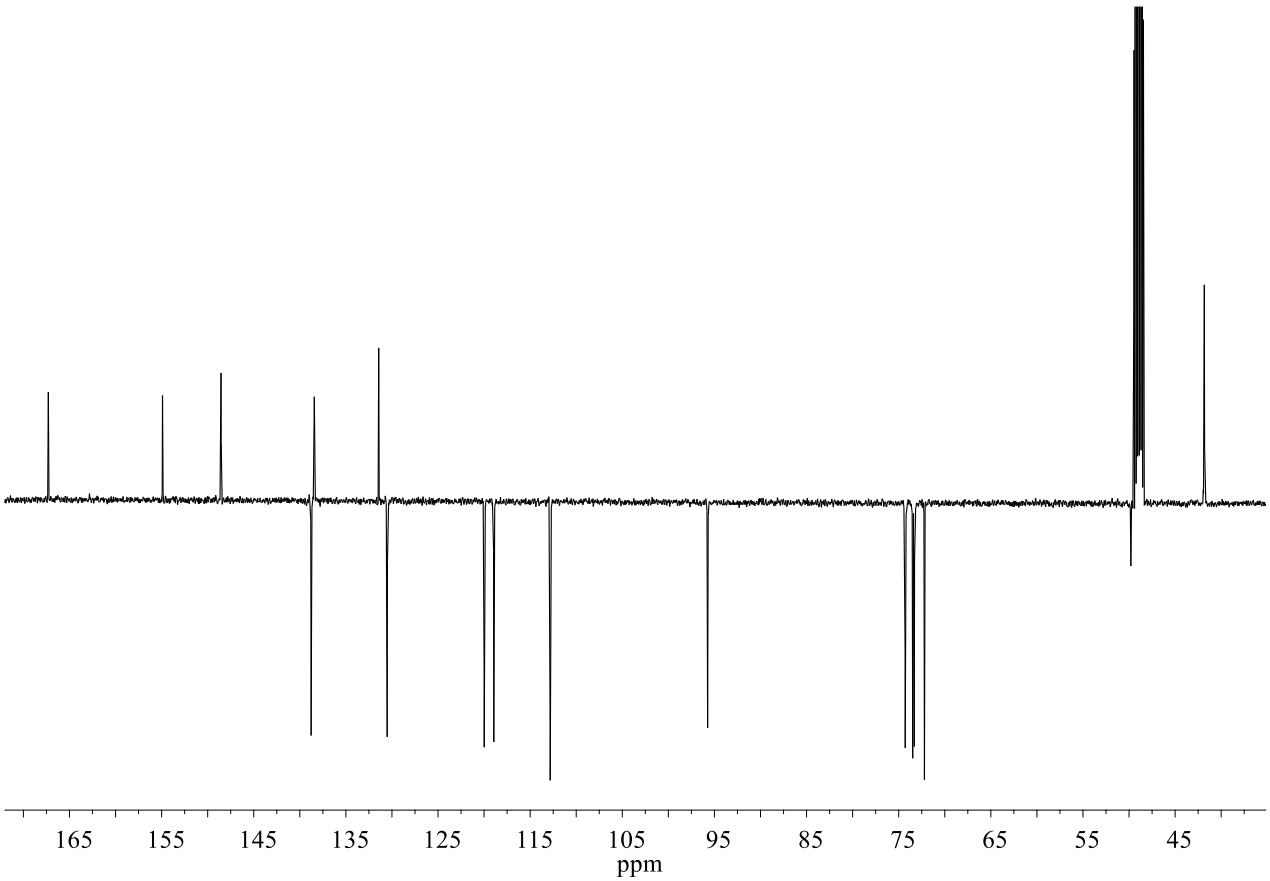

Figure S3. ^{13}C NMR spectrum of Tre(HQ)$_2$ in CD_3OD at 125 MHz.

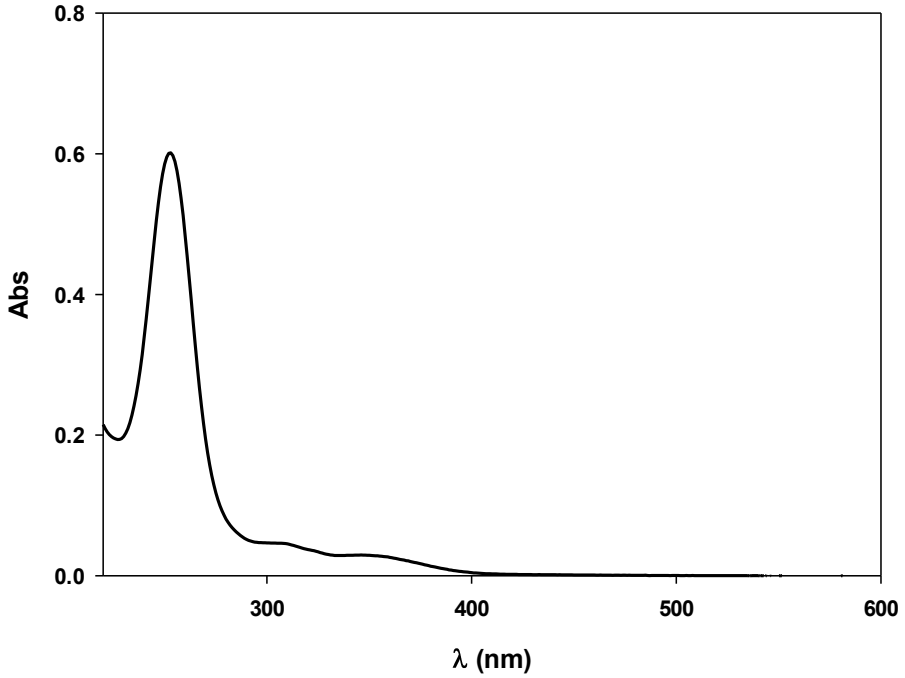

Figure S4. UV-vis spectra of Tre(HQ)$_2$ (C_L =3.0 × 10^{-5} M) in MOPS (10 mM, pH 7.4).

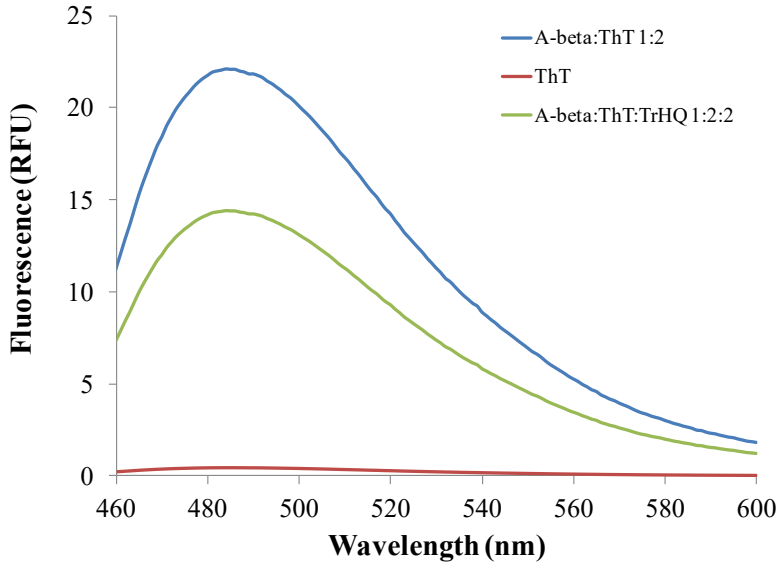

Figure S5. Fluorescence spectra of the dye alone (ThT), with Aβ1-42 (A-beta) and in the presence of TreHQ after 24h of incubation at 37°C.

Table S1. Kinetic parameters related to the aggregation of $A\beta_{1-42}$ in the presence of the HQ glycoconjugates (TreHQ, $Tre(HQ)_2$), Tre and HQ alone and mixed at 1:1 (Tre+HQ) or 1:2 (Tre+HQ) molar ratios. the Aβ/compound(mixed compounds) ratio was 1:2. The aggregation of Aβ alone is the control sample (CTRL). All results are expressed as mean ± standard deviation (SD).

	$F_{max} - F_0$ *(RFU)*	k *(h)*	t_{lag} *(h)*
Aβ	21.0 ± 0.3	1.3 ± 0.2	9.7 ± 0.3
Aβ+TreHQ	14.2 ± 0.2	1.8 ± 0.2	12.4 ± 0.3
Aβ+Tre+HQ	15.8 ± 0.1	1.4 ± 0.1	12.2 ± 0.2
Aβ+Tre+2HQ	13.1 ± 0.5	3.8 ± 0.3	13.2 ± 0.8
Aβ+Tre	18.2 ± 0.4	3.9 ± 0.5	15.2 ± 0.3
Aβ+HQ	17.6 ± 0.3	1.3 ± 0.1	12.5 ± 0.4