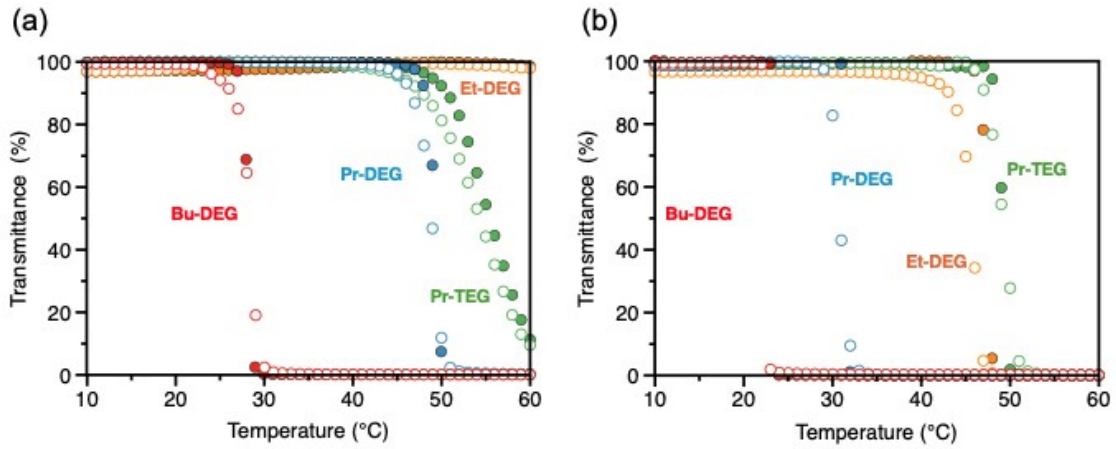
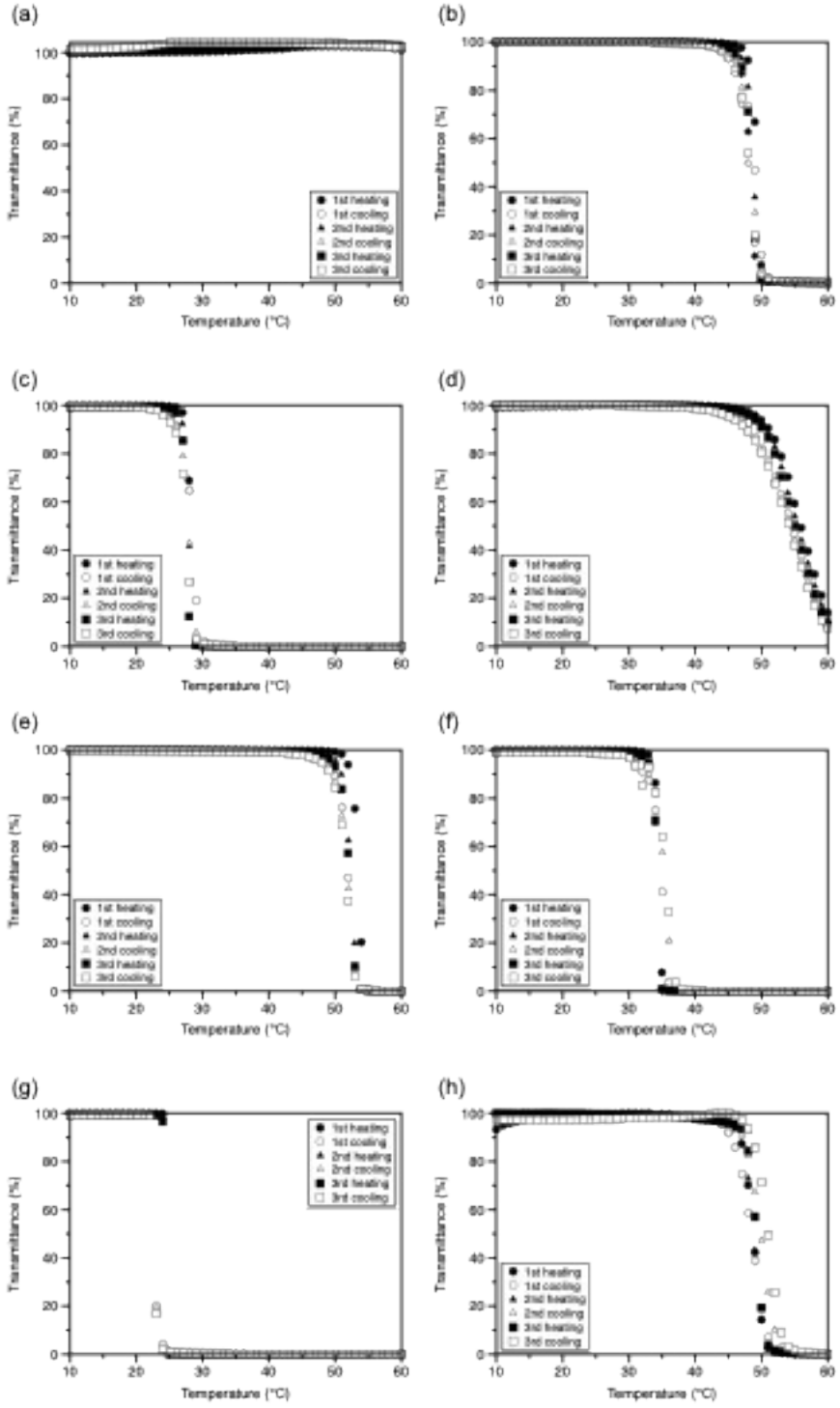


Figure S1. Transmittance curves of (a) 1 wt% and (b) 5wt% aqueous solutions of alkyl gallates measured at 500 nm. The temperature changed for 1 °C/min at the range of 10 to 60 °C.


(a)
(b)
(c)
(d)
(e)
(f)
(g)
(h)
Transmittance (%)
Temperature (°C)
1st heating
1st cooling
2nd heating
2nd cooling
3rd heating
3rd cooling

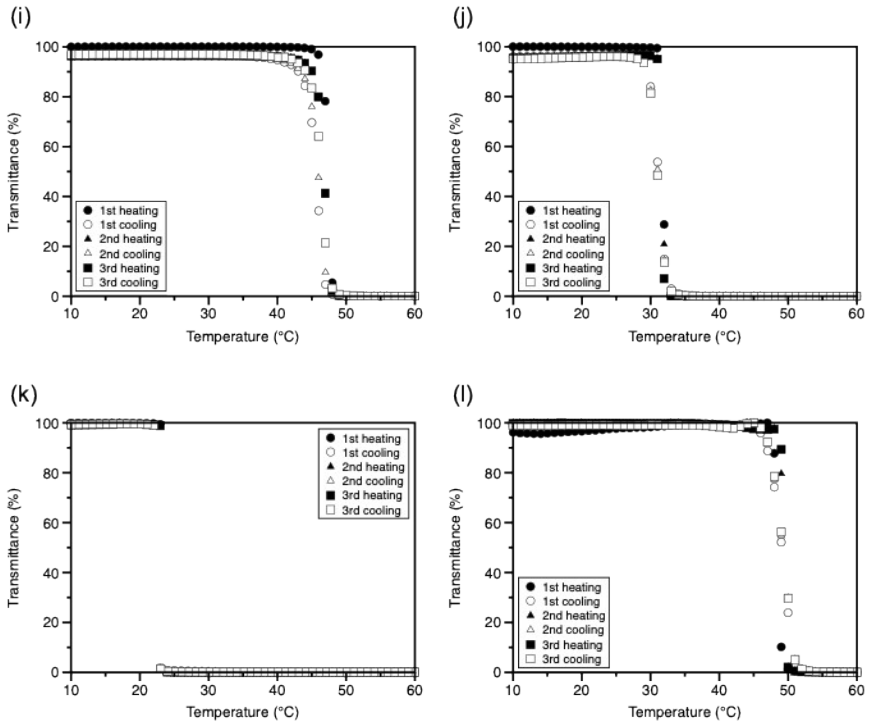


Figure S2. Transmittance curves of aqueous solutions of alkyl gallates measured at 500 nm during three consecutive heating and cooling cycles: (a) **Et-DEG** (1 wt%), (b) **Pr-DEG** (1 wt%), (c) **Bu-DEG** (1 wt%), (d) **Pr-TEG** (1 wt%), (e) **Et-DEG** (3 wt%), (f) **Pr-DEG** (3 wt%), (g) **Bu-DEG** (3 wt%), (h) **Pr-TEG** (3 wt%), (i) **Et-DEG** (5 wt%), (j) **Pr-DEG** (5 wt%), (k) **Bu-DEG** (5 wt%), and (l) **Pr-TEG** (5 wt%). The temperature was varied at a rate of 1 °C min^{-1} over the range of 10–60 °C.

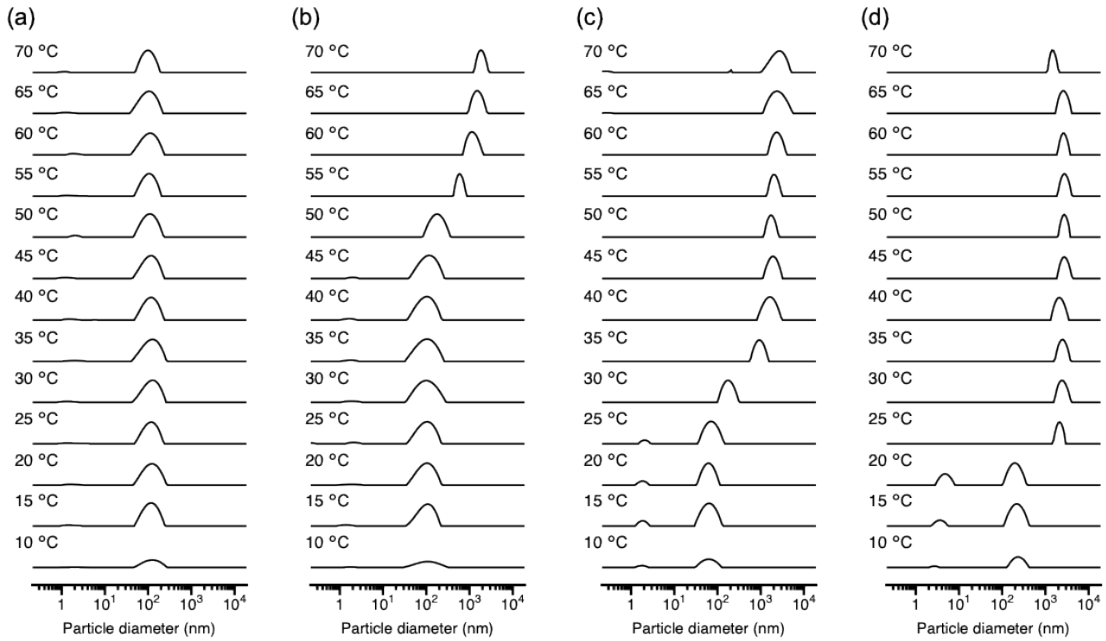


Figure S3. Temperature dependence of the particle size distributions in 3 wt% aqueous solutions of (a) **Me-DEG**, (b) **Et-DEG**, (c) **Pr-DEG**, (d) **Bu-DEG** measured by DLS method.

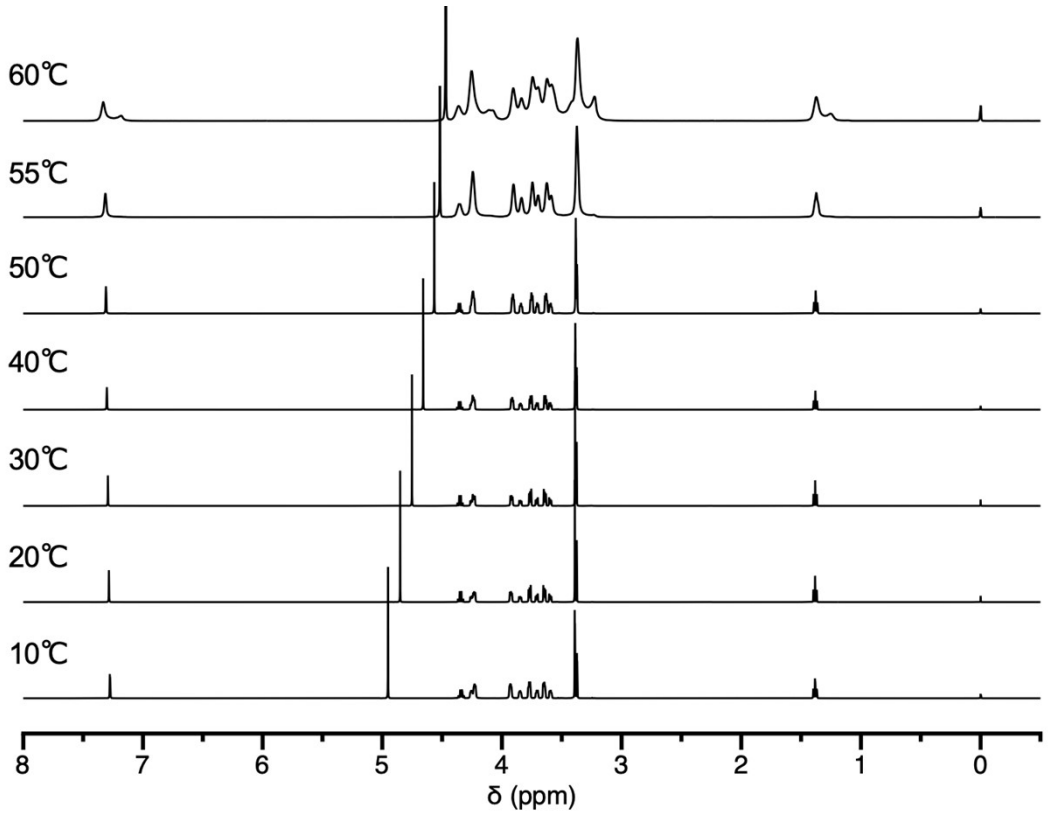


Figure S4. Temperature dependence of ^{1}H-NMR spectra of 3wt% **Et-DEG** in D_2O**.**

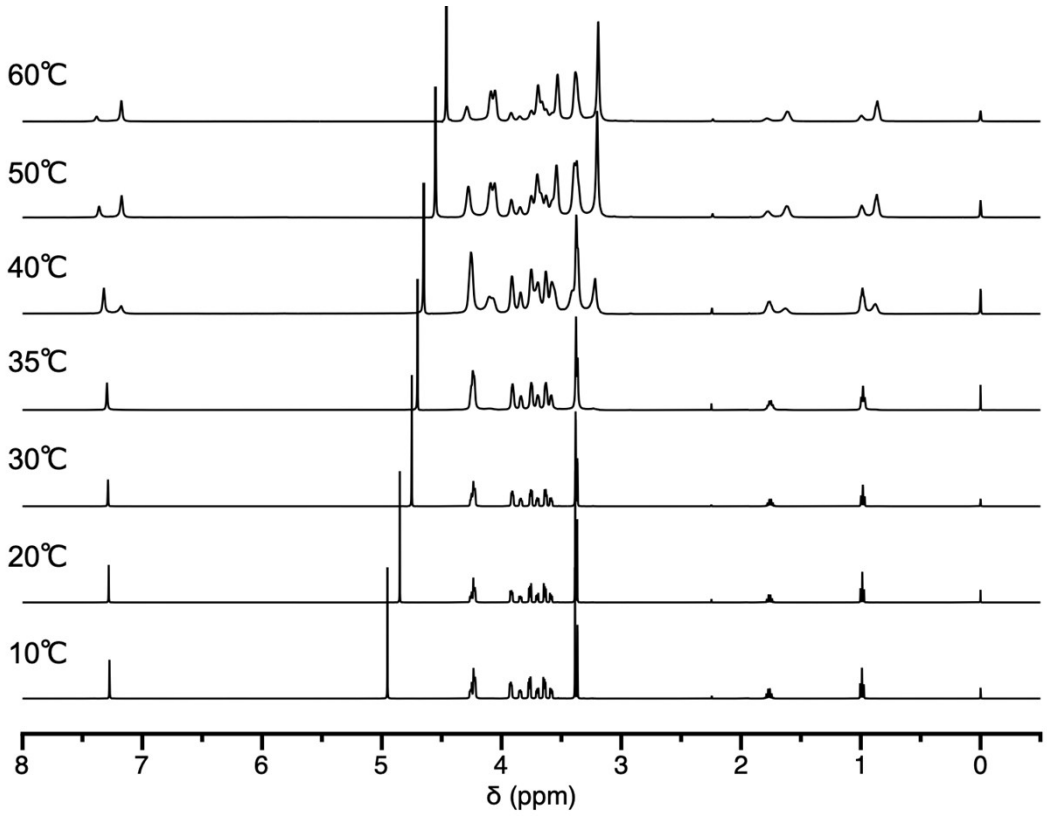


Figure S5. Temperature dependence of ^{1}H-NMR spectra of 3wt% **Pr-DEG** in D_2O**.**

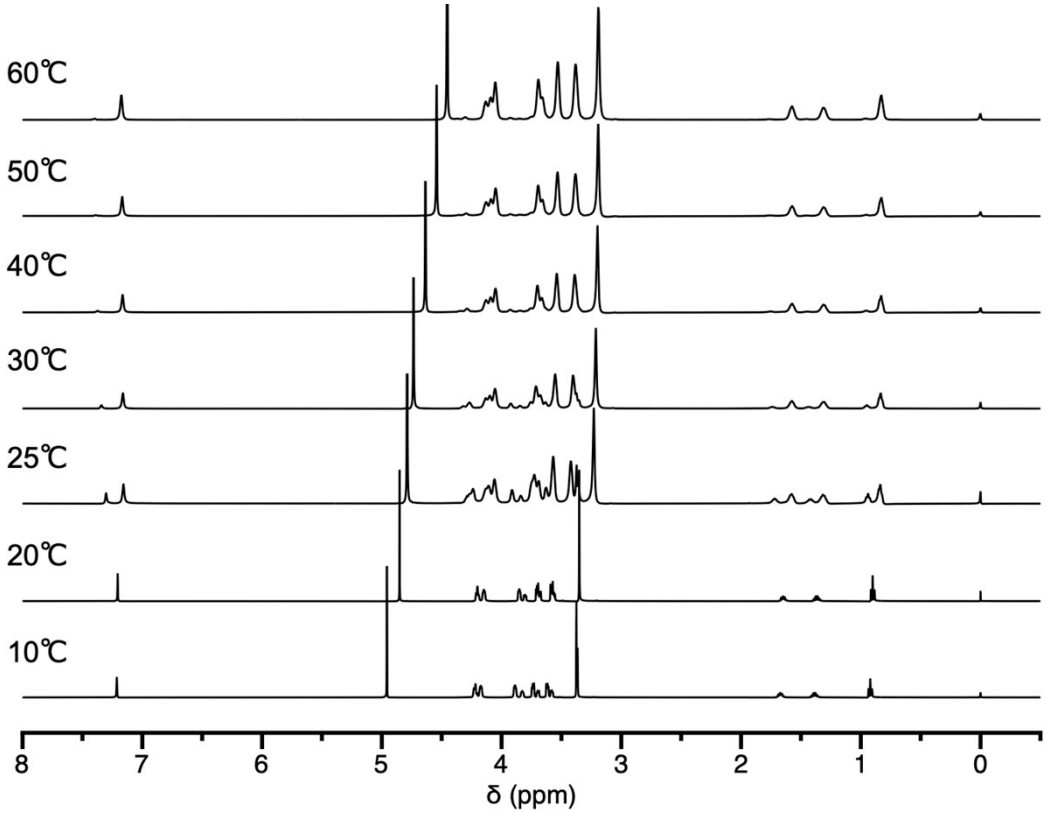


Figure S6. Temperature dependence of ^{1}H-NMR spectra of 3wt% **Bu-DEG** in D_2O**.**

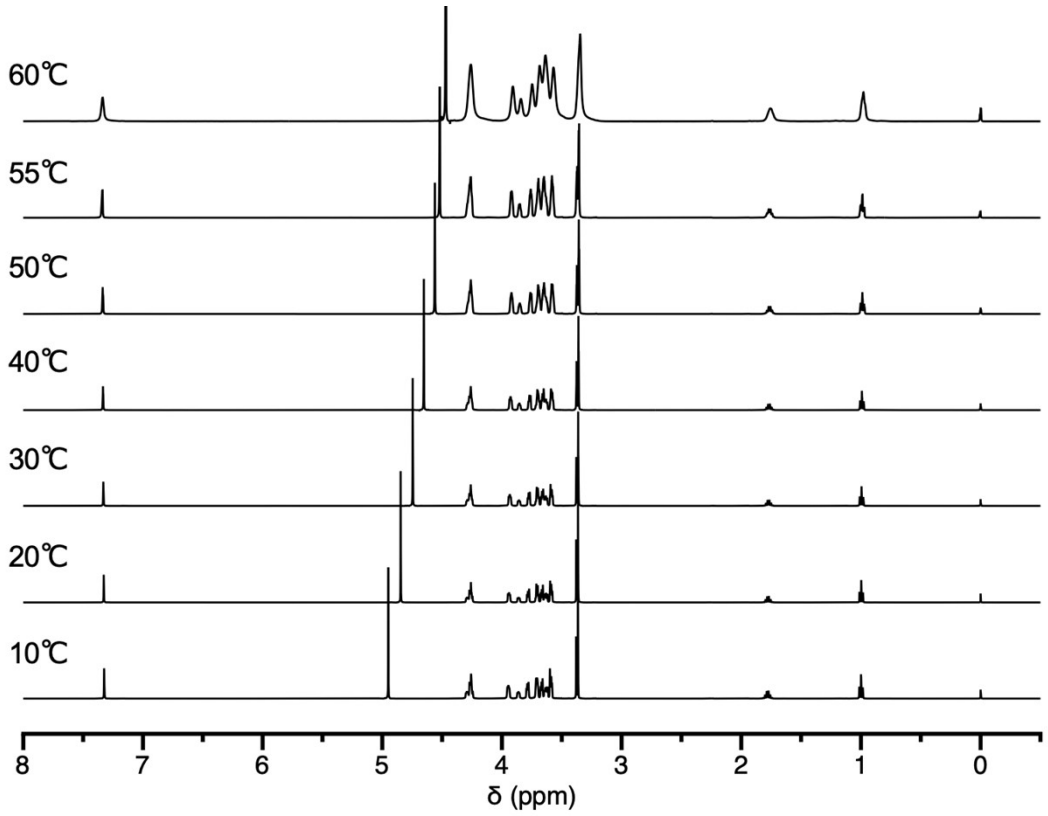


Figure S7. Temperature dependence of ^{1}H-NMR spectra of 3wt% **Pr-TEG** in D_2O**.**