

Supporting Information

for

Quarternization of 3-azido-1-propyne oligomers obtained by copper(I)-catalyzed azide–alkyne cycloaddition polymerization

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Estimation of the apparent self-diffusion coefficient for the oligomer quarternized

Figure 2a shows a typical example of the logarithm of the ratio of the observed spin echo intensities with and without field gradients ($\ln[I(g)/I(0)]$) as a function of $\gamma^2 g^2 \delta^2 (\Delta - \delta/3 - \tau/2)$ for oligoAPMe, where γ is the gyromagnetic ratio, g the gradient strength, Δ the delay between the midpoints of the gradients, δ the gradient length, and τ the 90°–180° pulse distance. From the slopes of the straight lines and the Sterjkal equation [1-3]

$$\ln[I(g)/I(0)] = -\gamma^2 g^2 \delta^2 (\Delta - \delta/3 - \tau/2) D \quad (\text{S1})$$

the apparent self-diffusion coefficients (D) were determined.

References

1. Stejskal, E. O.; Tanner, J. E. *J. Chem. Phys.* **1965**, *42*, 288-292.
2. Tanner, J. E.; Stejskal, E. O. *J. Chem. Phys.* **1968**, *49*, 1768-1777.
3. Stilbs, P. *Prog. Nucl. Magn. Reson. Spectrosc.* **1987**, *19*, 1-45.