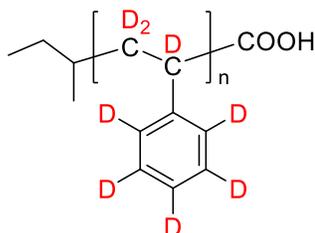


Sample Name: Deuterated Poly(styrene-d₈),
ω-carboxy-terminated

Sample #: P6023-dPS

Structure:



Composition:

$M_n \times 10^3$ (g/mol)	M_w/M_n
51.8	1.03

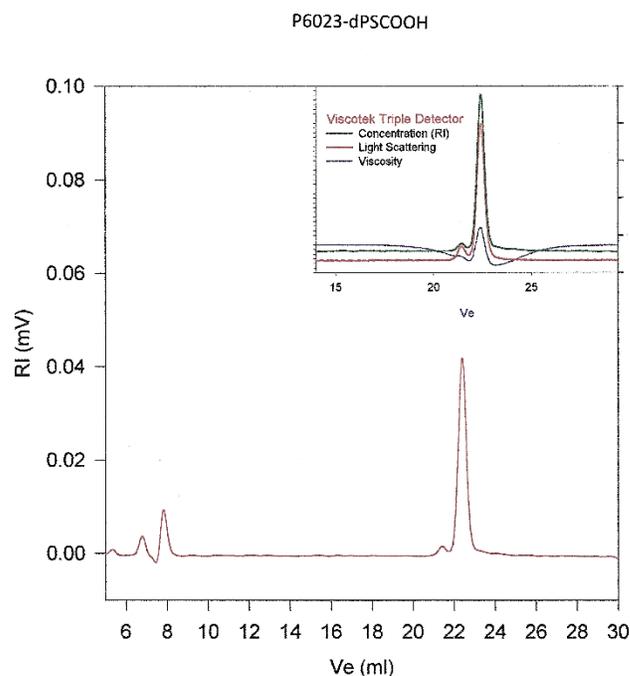
Synthesis procedure:

Deuterated polystyrene-d₈ was obtained by free radical polymerization process.

Characterization:

The molecular weight and polydispersity index (M_w/M_n) were obtained by size exclusion chromatography (SEC) in THF. Degree of functionality (-COOH end-group, %) was determined by titration.

SEC chromatogram:



Size Exclusion Chromatography of deuterated polystyrene:
(before addition of CO₂)

— $M_w/M_n = 1.03$ (calculated from polystyrene calibration)

$M_n = 51800$, $[\eta] = 0.322$ dL/g (THF, 30°C), $R_g = 8.50$ nm
(from Viscotek Triple detector)

Functionality verified by titration: $f > 0.92$