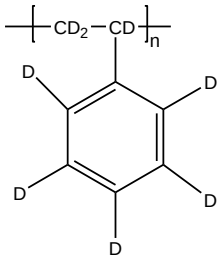
Sample Name: **Deuterated Polystyrene (d_8)**

Sample #: **P5859C-dPS**

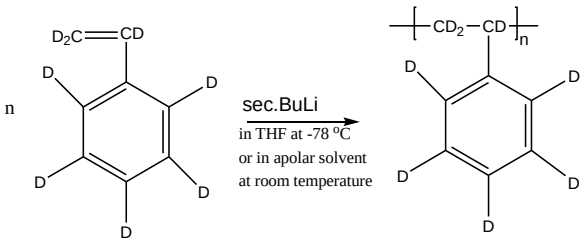
Structure:



Composition:

Mn x 10^3	PDI
42.0	1.3

Synthesis Procedure:
Deuterated polystyrene-d_8 is obtained by living anionic polymerization of styrene-d_8 as illustrated below:



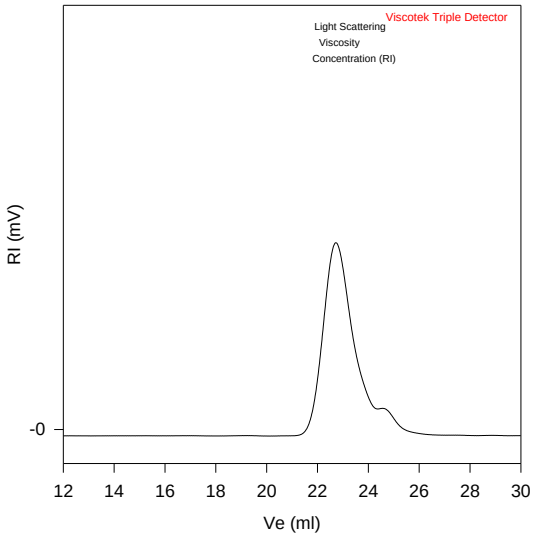
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors from Viscotek Co. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used.

Solubility:
Deuterated polystyrene-d_8 is soluble in DMF, THF, toluene and $CHCl_3$. It precipitates from methanol, ethanol, water and hexanes.

SEC of Homopolymer:

P5859c-dPS



Size Exclusion Chromatography of deuterated polystyrene (d8)

—— M_n = 42,000, M_w = 56,000, M_w/M_n = 1.3