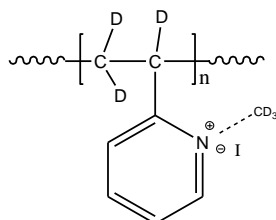


Sample Name:

**Deuterated (d3) Poly(2-vinyl pyridine)-quaternized with methyl-D3 methyl iodide**  
(ethynyl groups are deuterated)

Sample #: P2959-d3P2VPQ

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
45.0	1.04

**Synthesis Procedure:**

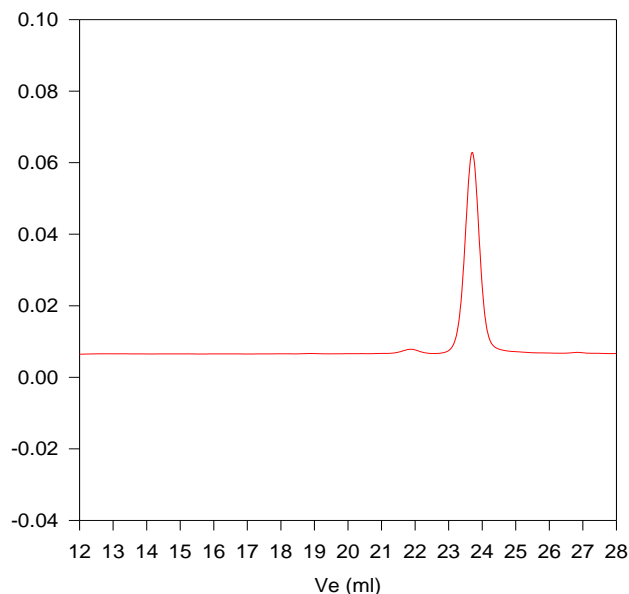
The polymer was prepared by anionic living polymerization process and quaternized with CD<sub>3</sub>I.

**Characterization:**

The molecular weight and polydispersity index (PDI) were 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. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

**SEC elugram of starting material before Quaternization**

**P2959-d3P2VP**



Size Exclusion Chromatography of deuterated (d3-vinyl protons) Poly(2-vinylpyridine):  
M<sub>n</sub>=25000, M<sub>w</sub>=26000, PI=1.04

**After Quaternization with CD<sub>3</sub>I Mn: 45,000  
Mw/Mn :1.04**