

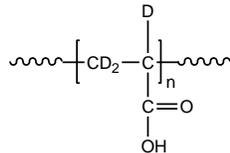
Sample Name:

**Deuterated (d3) Poly(acrylic acid)**

Backbone protons are deuterated

Sample #: P6572-d3PAA

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI
1.5	1.9

**Synthesis Procedure:**

Poly(d3 acrylic acid) is obtained by the catalytic hydrolysis of Poly d3 benzyl acrylate, which was prepared by ATRP process.

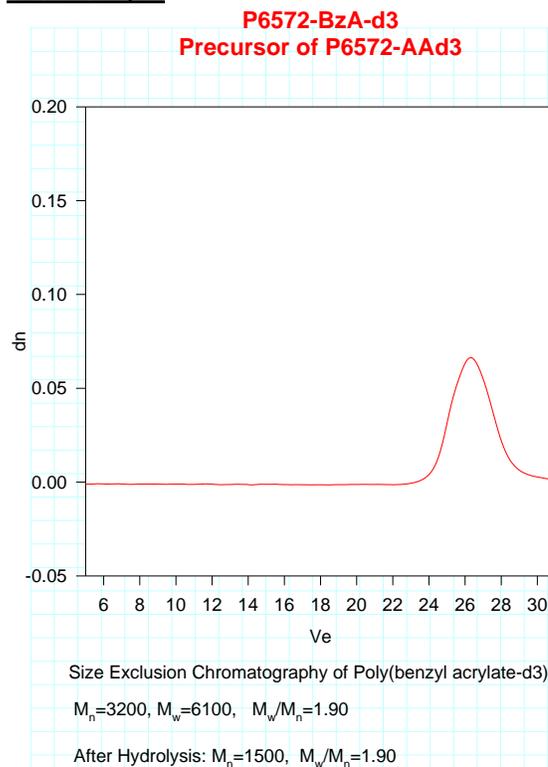
**Characterization:**

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. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co.

**Solubility:**

Polymer is soluble in THF, methanol, ethanol and CHCl<sub>3</sub>. This polymer precipitates from ether or hexanes.

**SEC of Sample:**



D NMR of Benzyl acrylate monomer:

