

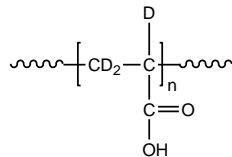
Sample Name:

Deuterated (d3) Poly(acrylic acid)

Backbone protons are deuterated

Sample #: **P6571-d3PAA**

Structure:



Composition:

$M_n \times 10^3$	PDI
3.2	1.25

Synthesis Procedure:

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

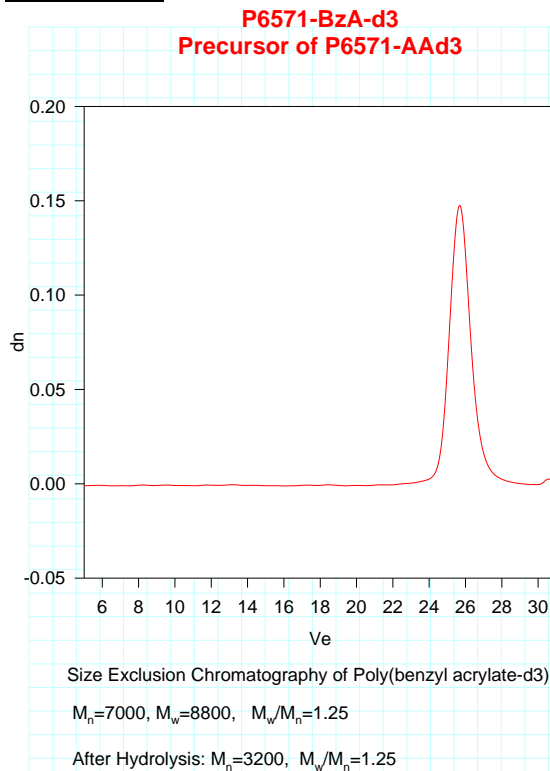
Characterization:

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_3 . This polymer precipitates from ether or hexanes.

SEC of Sample:



D NMR of Benzyl acrylate monomer:

