

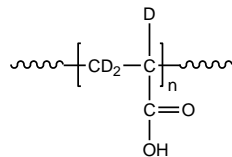
Sample Name:

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

Backbone protons are deuterated

Sample #: **P6572-d3PAA**

**Structure:**



**Composition:**

$M_n \times 10^3$	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:**

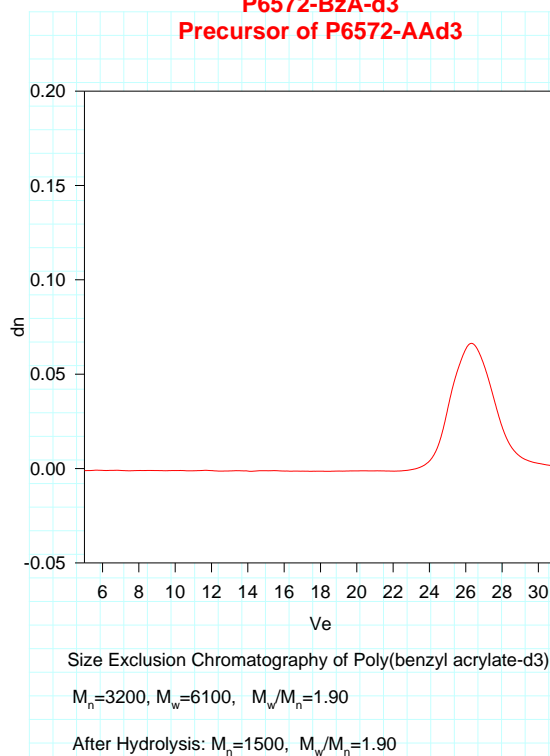
The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF. SEC analysis was performed on a Varian liquid chromatograph equipped with refractive and UV light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple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

**Solubility:**

Polymer is soluble in THF, methanol, ethanol and  $CHCl_3$ . This polymer precipitates from ether or hexanes.

SEC of Sample:

**P6572-BzA-d3**  
**Precursor of P6572-AAAd3**



D NMR of Benzyl acrylate monomer:

