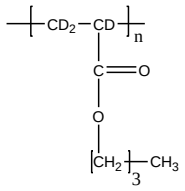
Sample Name:
Deuterated Poly(n-butyl acrylate-d3)
Backbone protons are deuterated

Sample #: **P42336-d3nBuA**

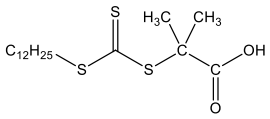
Structure:



Composition:

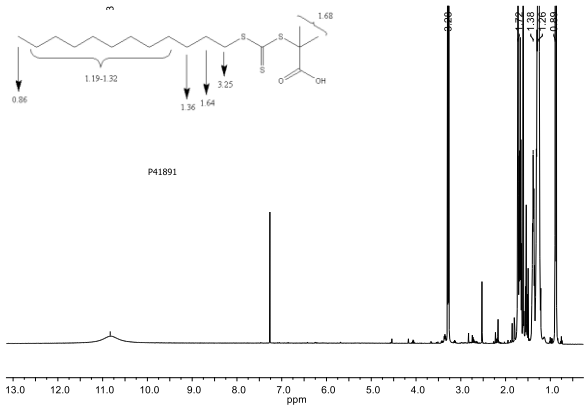
Mn x 10^3	PDI
6.5	1.12

Synthesis Procedure:
Poly(d3 acrylic acid) is obtained by the RAFT polymerization for d3AA monomer in dioxane. Then the obtained polymer was trans-esterified in presence of n-butanol.
RAFT used in this synthesis :



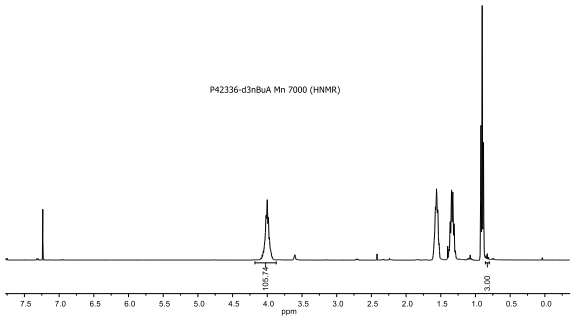
Chemical Formula: $C_{17}H_{32}O_2S_3$
Molecular Weight: 364.6

^{1}H NMR of RAFT (500 MHz, $CDCl_3$):

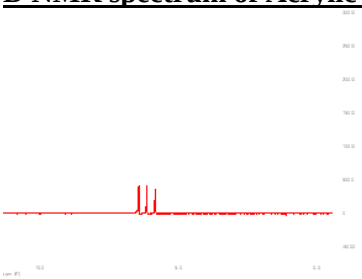


Characterization:
The product was characterized by size exclusion chromatography (SEC) and ^{1}H NMR.

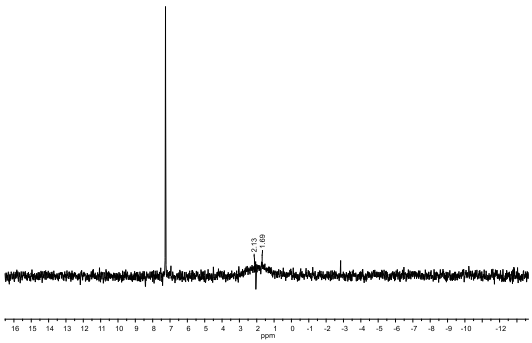
H NMR spectrum of the polymer in CdCl3:



D NMR spectrum of Acrylic acid monomer:



D NMR spectrum of the Polymer in CHCl3:



SEC elugram of the Sample: