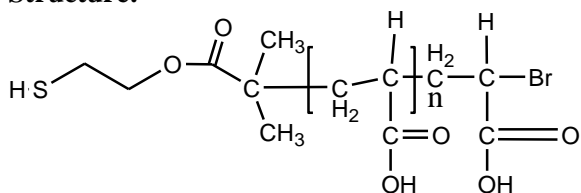


**Sample Name:** Thiol terminated Poly (acrylic acid)

**Sample #:** P41479-AASH

**Structure:**

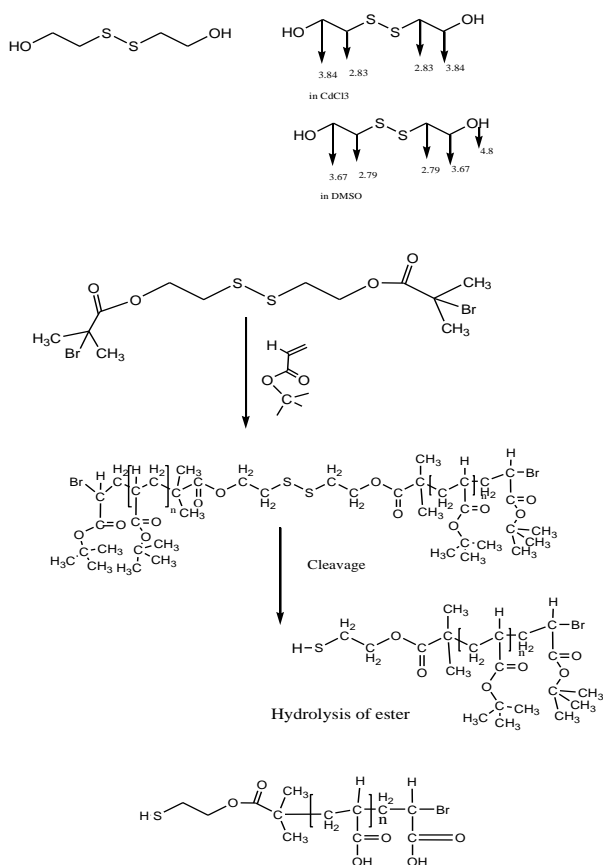


**Composition:**

Mw x10 <sup>3</sup>	Mn x10 <sup>3</sup>	PDI
8.5	7.0	1.20

**Synthesis Procedure:**

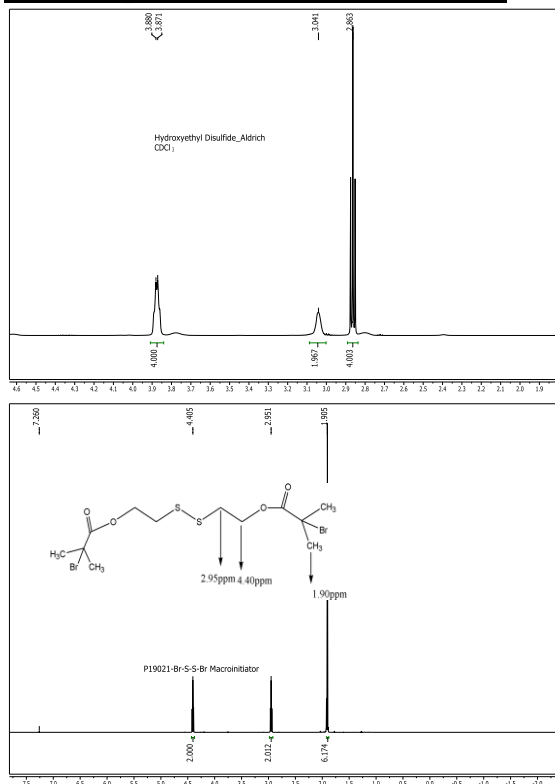
The polymer was synthesized by ATRP polymerization process. The following reaction scheme shows how the product was prepared:



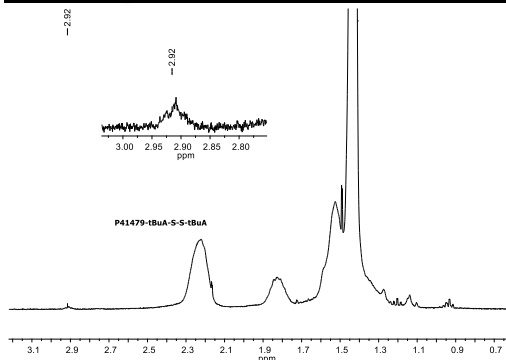
**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR.

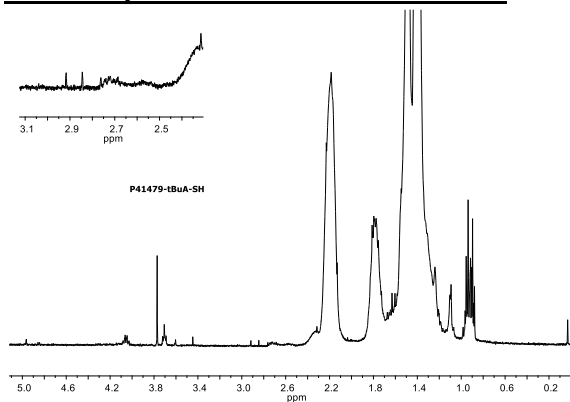
**<sup>1</sup>H NMR spectrum of the macroinitiator:**



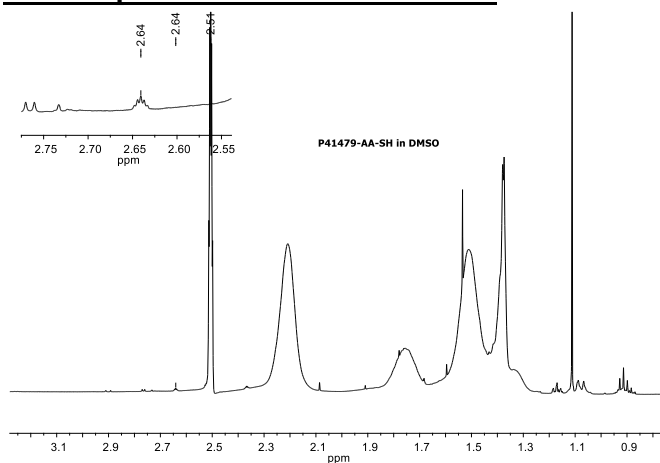
**<sup>1</sup>H NMR spectrum of the Disulfide form:**



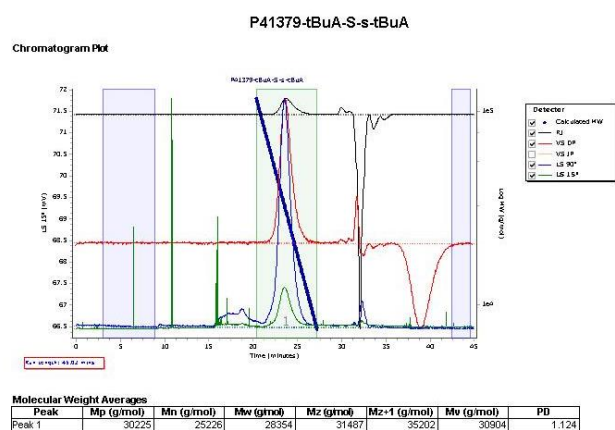
**<sup>1</sup>H NMR spectrum of the free thiol form:**



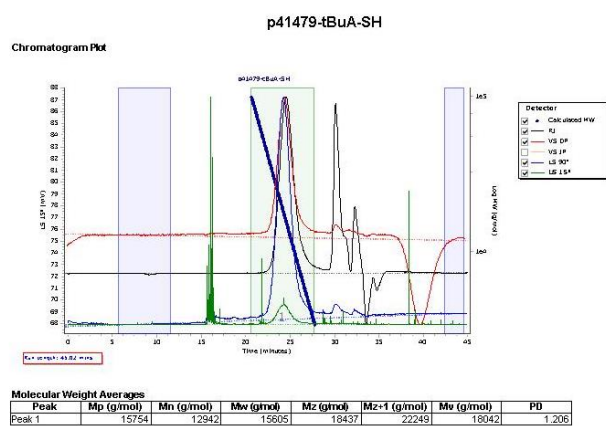
## HNMR spectrum of PAA-SH in DMSO



## SEC elugram of the PtBuA-S-StBuA:



## SEC elugram of the PtBuA-S-H:



After Hydrolysis of tert-butyl ester:  
PAA-SH Mn: 7,000 Mw/Mn: 1.20