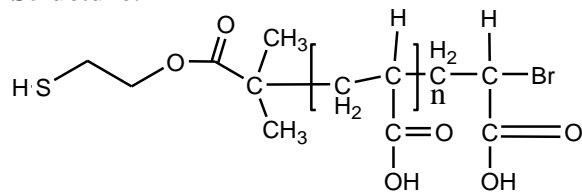


Sample Name:
Poly(acrylic acid), (α -thiol, ω -bromo)-terminated

Sample #: P41480-AASH

Structure:

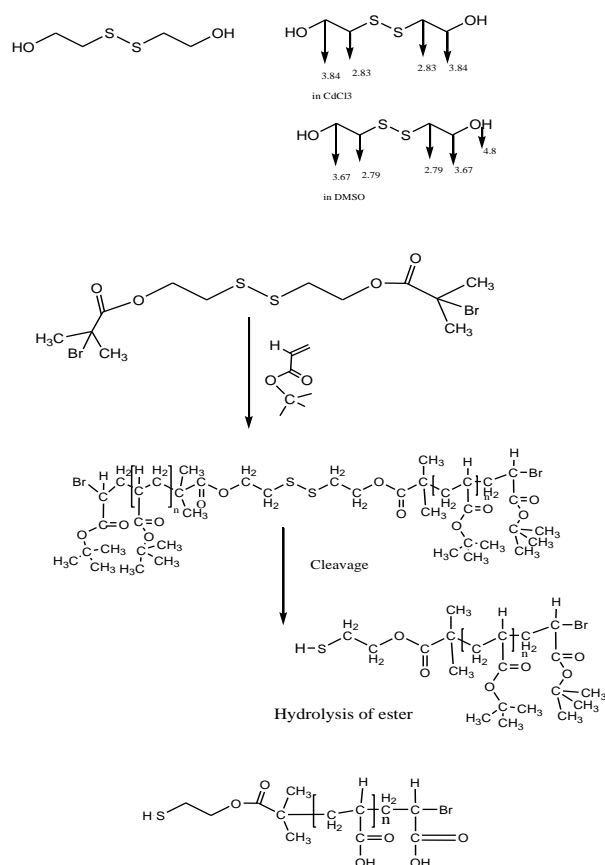


Composition:

Mn x10 ³	Mw x10 ³	PDI
8.0	9.0	1.13

Synthesis Procedure:

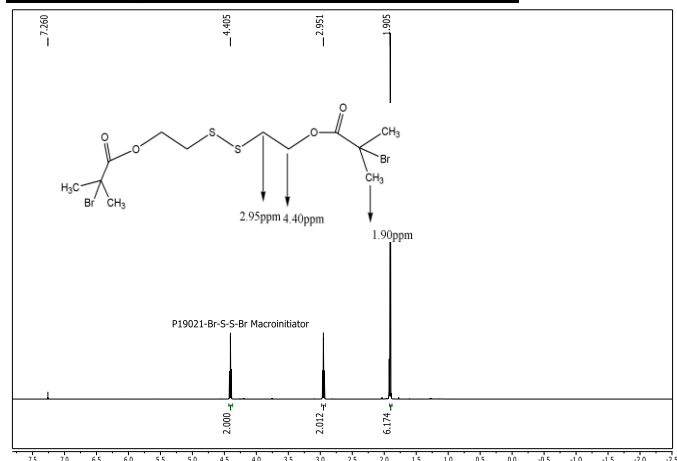
The polymer was synthesized by ATRP. The following reaction scheme shows the product preparation:



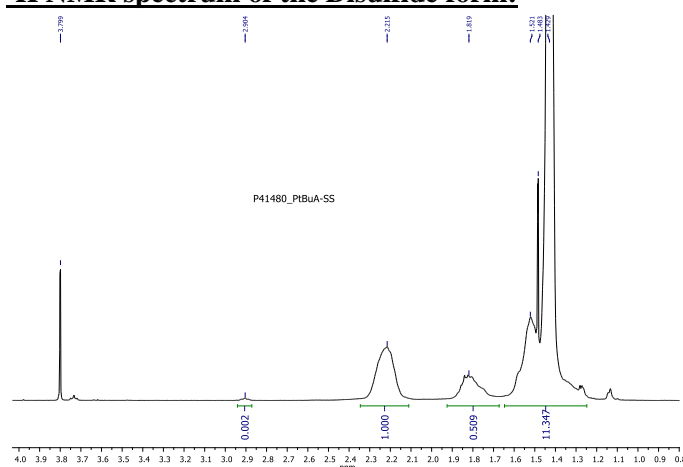
Characterization:

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

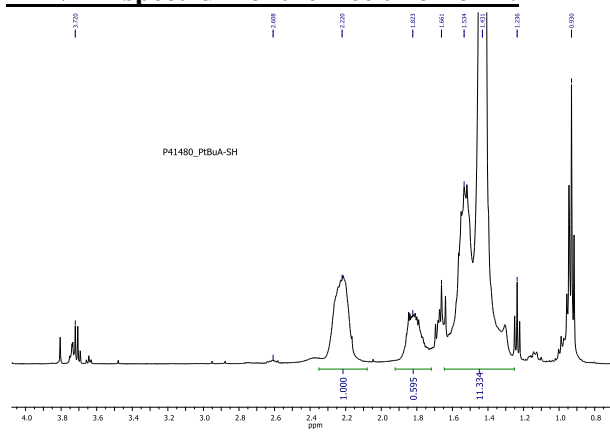
¹H NMR spectrum of the macroinitiator:



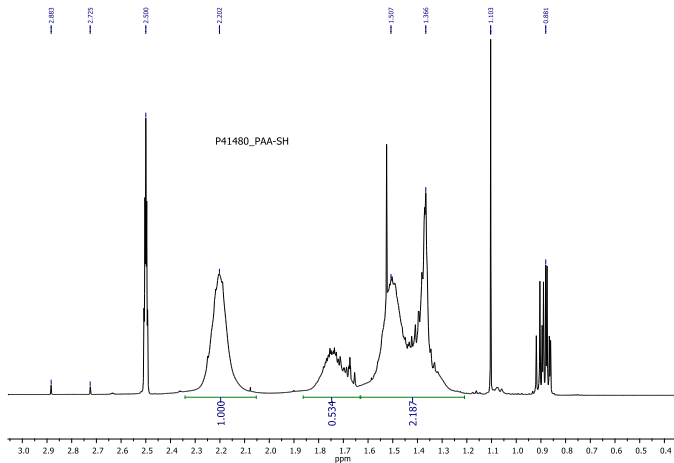
¹H NMR spectrum of the Disulfide form:



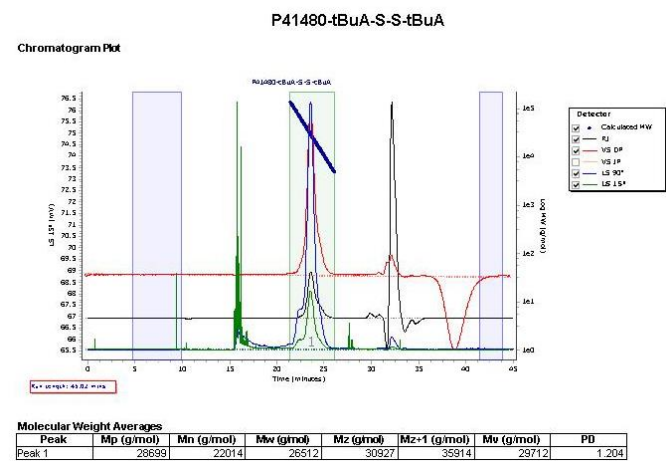
¹H NMR spectrum of the free thiol form:



¹HNMR spectrum of PAA-SH run in DMSO:

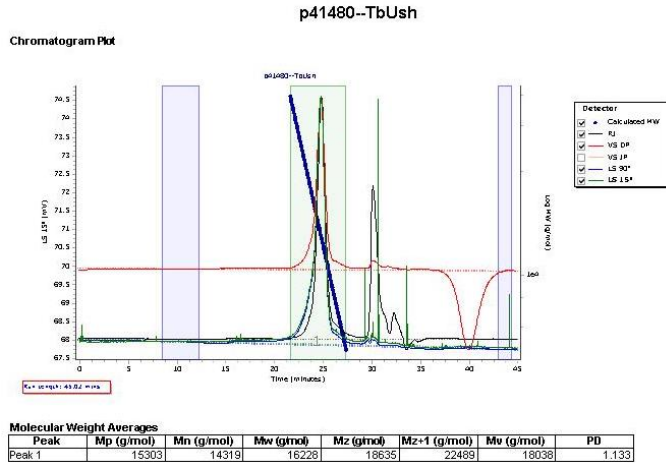


SEC elugram of the PtBuA-S-StBuA:



Molecular Weight Averages							PD
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	
Peak 1	26699	22014	26512	30927	35914	29712	1.204

SEC elugram of the PtBuA-S-H:



Molecular Weight Averages							PD
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	
Peak 1	15303	14319	16228	18635	22489	18038	1.133

After Hydrolysis of tert-butyl ester:
PAA-SH Mn: 8,000 Mw/Mn: 1.13