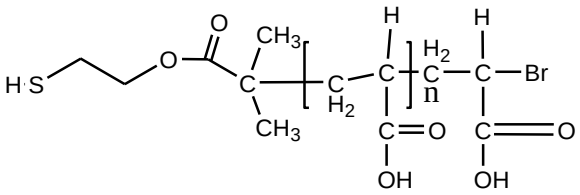
Sample Name: **Thiol terminated Poly (acrylic acid)**

Sample #: **P41181A-AASH**

Structure:

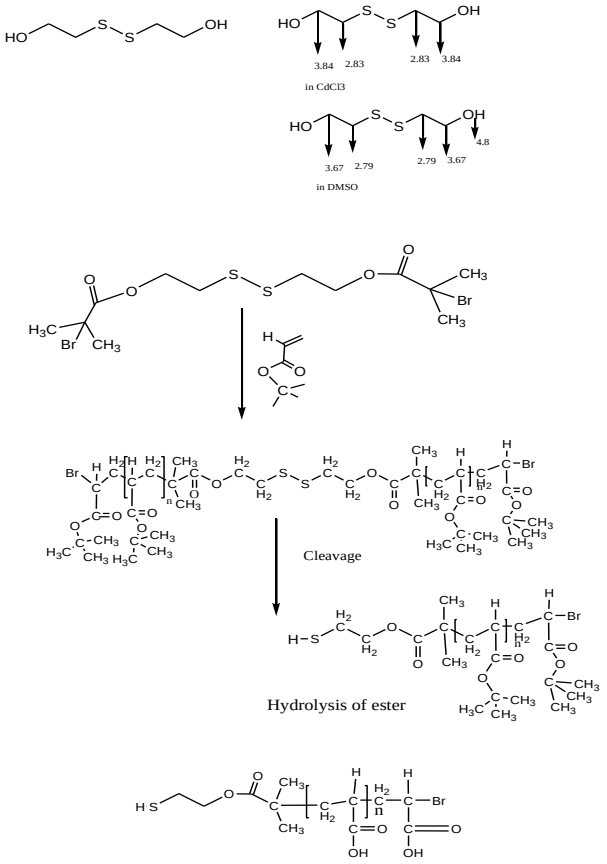


Composition:

Mw x10^3	**Mn x10^3**	PDI
20.0	16.0	1.25

Synthesis Procedure:

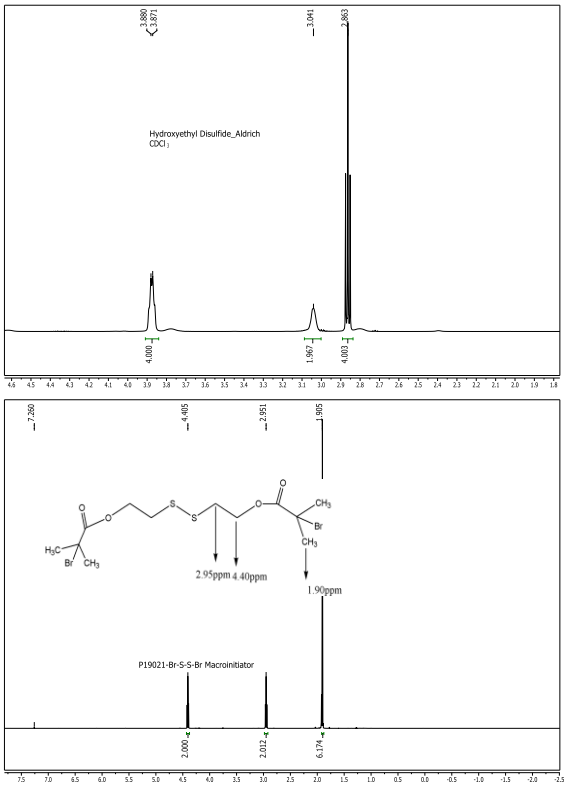
The polymer was synthesized by ATRP polymerization process. The following reaction scheme shows how the product was prepared:



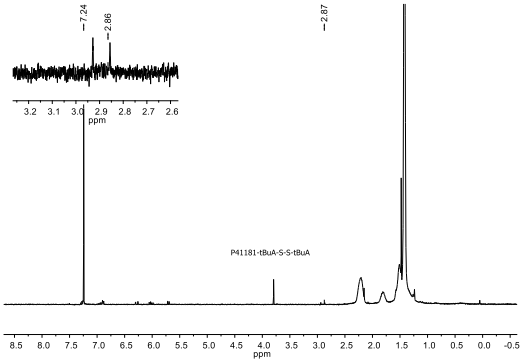
Characterization:

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

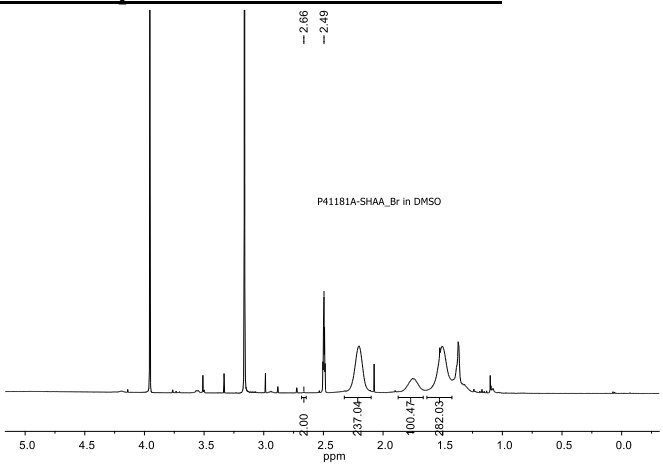
H NMR spectrum of the macroinitiator:



H NMR spectrum of the Disulfide form:



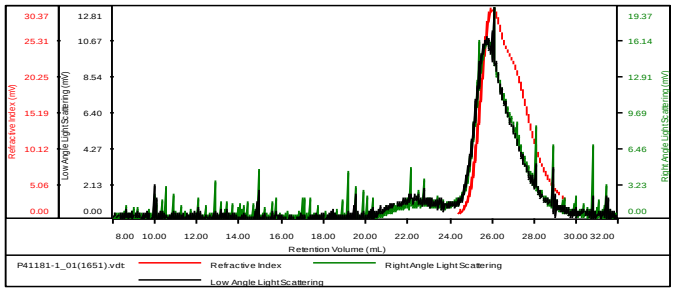
H NMR spectrum of the free thiol form:



SEC elugram of the PtBuA-S-StBuA:

P41181-tBuA-S-S-tBuA

Concentration (mg/mL)	2.0895
Sample dn/dc (mL/g)	0.0840
Method File	PS99K-May-2018-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P41181-1_01(1651)	62,581	78,080	1.248	0.8708	76,915

After Hydrolysis of tert-butyl ester:

PAA-SH Mn: 16,000 Mw/Mn: 1.25