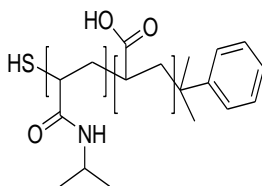


**Sample Name:** Poly(N-isopropylacrylamide-co-acrylic acid),  $\alpha$ -thiol functionalized

**Sample#:** P60659-2-NIPAMAA-SH

**Structure:**

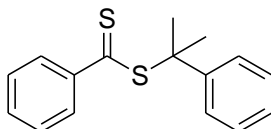


**Composition:**

$M_n \times 10^3$	PDI
21.0	1.24
Poly(NIPAM) <sub>130</sub> -Poly(AA) <sub>90</sub>	

**Synthesis Procedure:**

The polymer was synthesized by RAFT polymerization process using the following RAFT CTA:



And subsequently tBu ester moiety was removed by treatment of the polymer with HCl in hexafluoroisopropanol, and dithiocarbonate was converted into thiol by hydrazine.

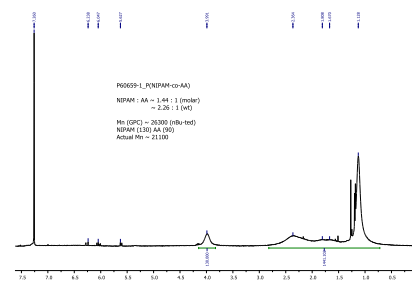
**Characterization:**

The product was characterized by size exclusion chromatography (SEC) and  $^1\text{H}$  NMR data analysis.

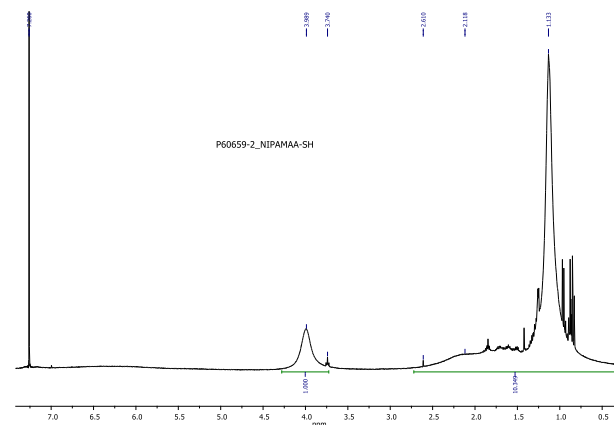
**Solubility:**

Polymer is soluble in methanol and insoluble in chloroform.

**HNMR of the precursor polymer run in CDCl<sub>3</sub>**



**HNMR of the polymer run in CDCl<sub>3</sub>**



**SEC elugram of precursor NIPAMnBuAran copolymer:**

