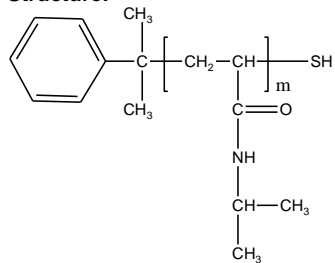


## Sample Name: Thiol terminated Poly(N-isopropyl acrylamide)

Sample #: P14593A-NIPAMSH

Structure:

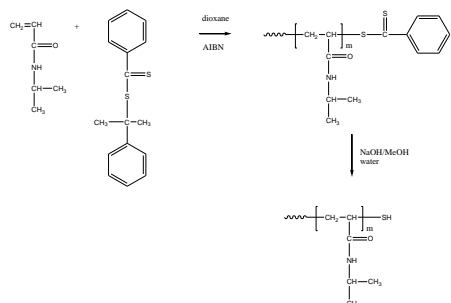


Composition:

Mn x 10 <sup>3</sup>	PDI
9.0	1.5

Synthesis Procedure:

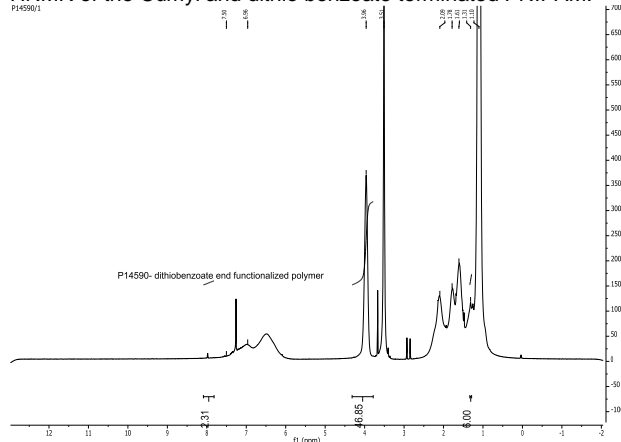
The polymer was prepared by reversible addition-fragmentation chain transfer (RAFT) of N-isopropyl acrylamide with a AIBN as initiator and cumyl dithiobenzoate as chain-transfer agent, followed by hydrolysis. The scheme of the reaction is illustrated below:



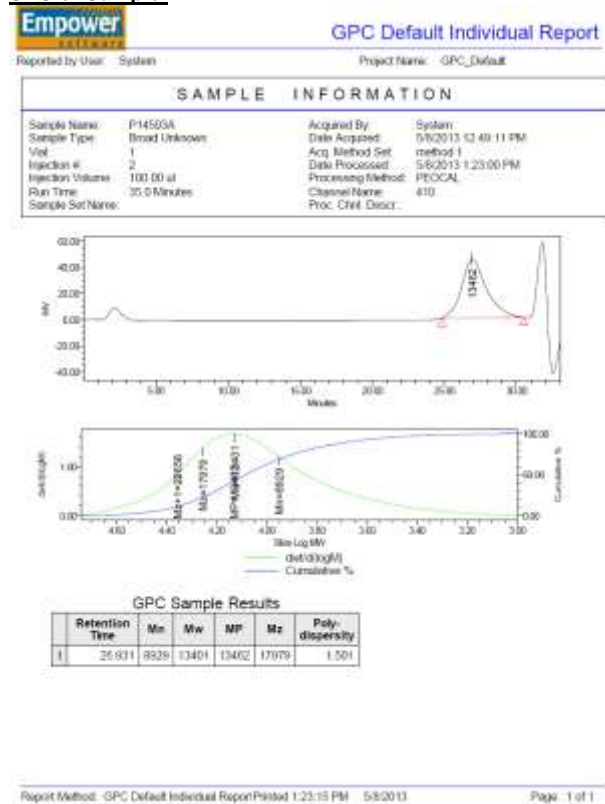
Characterization:

The molecular weight and polydispersity was determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector and DMF containing 0.05M LiBr salt as eluent. PEO reference materials was used to calculate molecular weights and its distribution. **Solubility:** The polymer is soluble in cold water methanol, ethanol, DMF, and dioxane, not soluble in hexane. HNMR of the Cumyl and dithio benzoate terminated Poly NIPAM

HNMR of the Cumyl and dithio benzoate terminated PNIPAM:



SEC of Sample:



HNMR of the PNIPAM\_SH:

