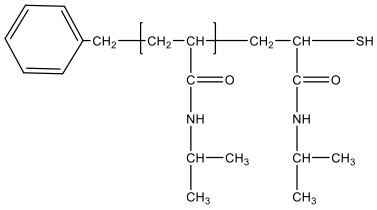
Sample Name:
Poly(N-isopropyl acrylamide), ω-thiol-terminated

Sample #: **P45050-NIPAMSH**

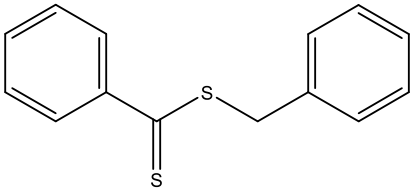
Structure:



Composition:

Mv x 10^3	PDI
5.0	1.18

Synthesis Procedure:
The polymer was prepared by reversible addition-fragmentation chain transfer polymerization (RAFT) of N-isopropyl acrylamide with AIBN as initiator and cumyl Di thiobenzoate as chain-transfer agent, followed by hydrolysis.



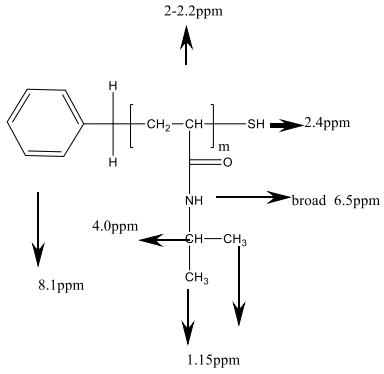
Purification of polymer:
Hydrolysis of the Di thiocarbamate End Groups in Poly (NIPAM-SH). The dithiol end groups of the obtained polymer samples were hydrolyzed to yield the corresponding thiol-terminated polymers under basic conditions. For this purpose, the polymer was dissolved in THF and stirrer with excess of isopropyl amine at Room temperature for 24h. Finally, polymer was subjected to sublimation to remove traces amount of NIPAM monomer as observed in its HNMR.

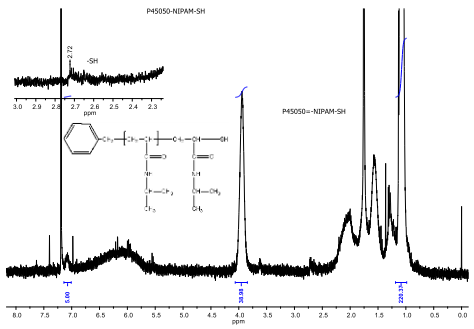
Characterization:
By FTIR, GPC and HNMR

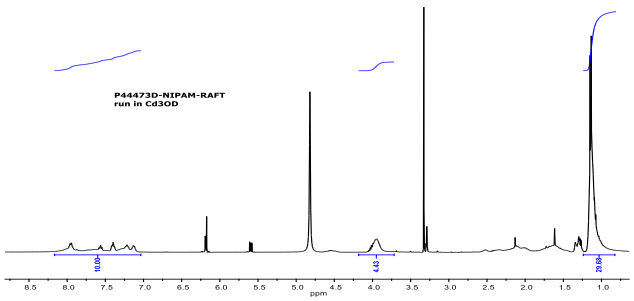
Solubility in different solvents:

THF	√	DMF	√
Alcohol	√	CHCl3	√
Water	**X**	DMSO	√

HNMR Spectrum of the Sample:







SEC profile of the Sample:
Run In water