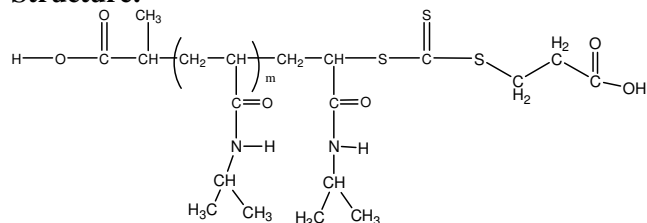


Sample Name: α,ω -dicarboxy terminated poly(N-isopropyl acrylamide)

Sample #: P16039A-NIPAM2COOH

Structure:



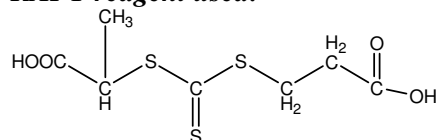
Composition:

Mn x 10 ³	PDI
12.5	1.28

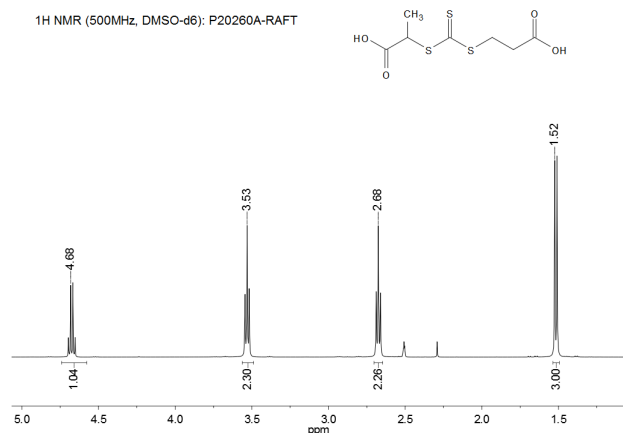
Synthesis Procedure:

α,ω -dicarboxy Terminated Poly(N-isopropyl acrylamide) was prepared by RAFT process:

RAFT reagent used:



¹H NMR spectrum of the RAFT reagent:



Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector with triple detector in DMF at 50°C.

Thermal analysis:

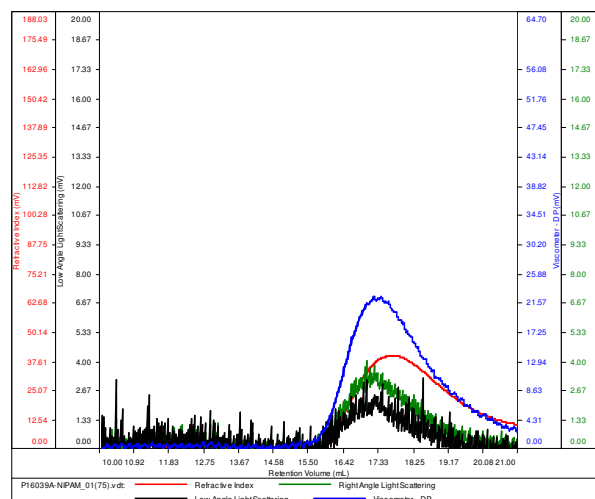
Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a

heating rate of 10°C/min. The inflection glass transition temperature (T_g) has been considered.

SEC elugram of the polymer:

P16039A-NIPAM-COOH

Conc (mg/mL)	5.5696
dn/dc (mL/g)	0.0770
Method	PS80k-May-25-2016-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P16039A-NIPAM_01(75).vdt	12,311	15,857	15,442	1.288	0.1125

DSC thermogram of the polymer:

