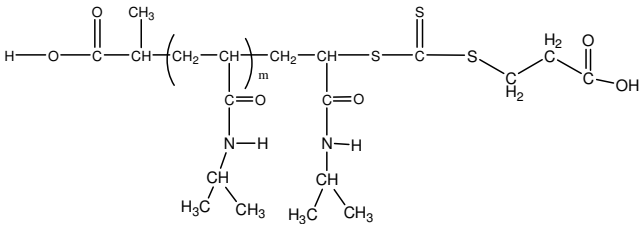
Sample Name: **α,ω-dicarboxy terminated poly(N-isopropyl acrylamide)**

Sample #: **P16040B-NIPAM2COOH**

Structure:



Composition:

Mn x 10^3	PDI
20.0	1.05

Synthesis Procedure:

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

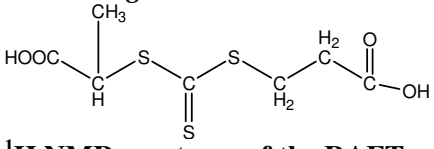
Characterization:

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 50^0C.

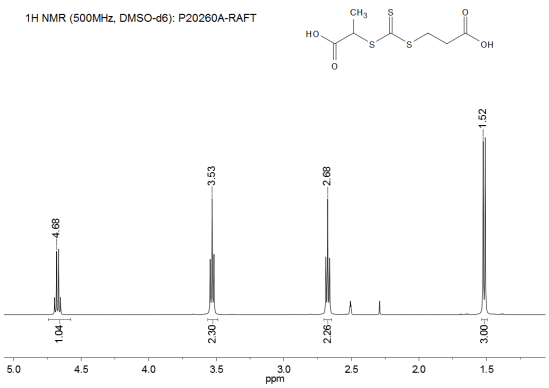
Thermal analysis:

Thermal analysis of the samples was carried out using a differential scanning calorimeter (TA Q100) at a heating rate of 10^oC/min.The inflection glass transition temperature (T_g) has been considered.

RAFT reagent used:



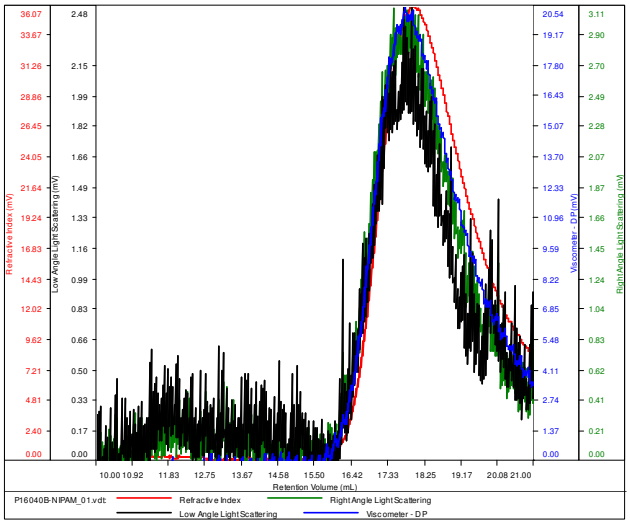
^{1}H NMR spectrum of the RAFT reagent:



SEC elugram of the polymer:

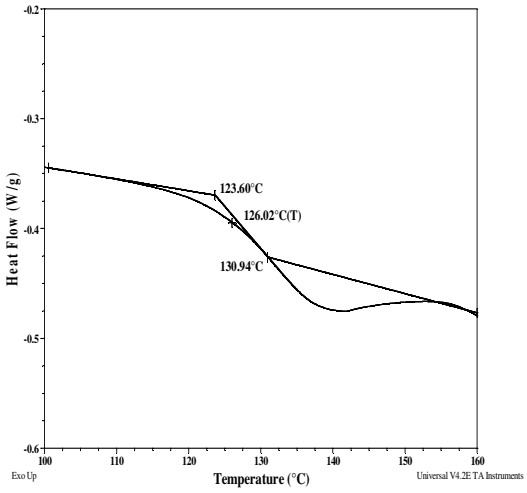
P16040B-NIPAM2COOH

Conc (mg/mL)	4.9983
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
P16040B-NIPAM_01.vdt	19,909	20,839	21,684	1.047	0.1207

DSC thermogram for the sample:



(v.K-01)