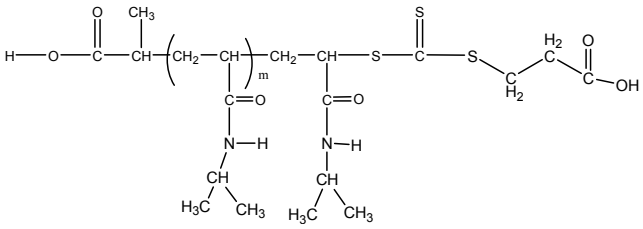
Sample Name: **α,ω-dicarboxy terminated poly(N-isopropyl acrylamide)**

Sample #: **P16039F-NIPAM2COOH**

Structure:



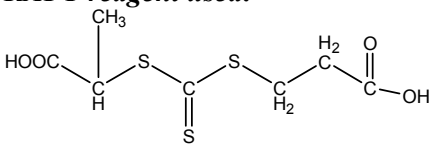
Composition:

Mn x 10^3	PDI
17.0	1.23

Synthesis Procedure:

α,ω-Dicarboxy terminated poly(N-isopropyl acrylamide) was prepared by RAFT process.

RAFT reagent used:



^{1}H 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.

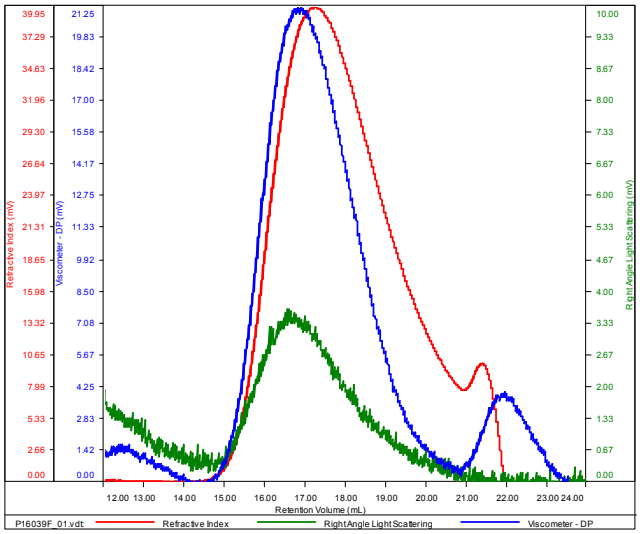
Thermal analysis:

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:

P16039F-NIPAM2COOH

Conc (mg/mL)	10.3944
dn/dc (mL/g)	0.0770
Method	PS80k_December-2016-0004.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P16039F_01.vdt	16,941	20,842	21,784	1.230	0.0595

DSC thermogram of the polymer: