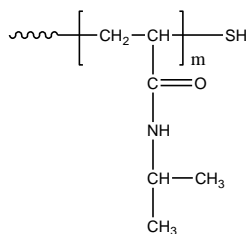


**Sample Name:** Thiol terminated Poly(N-isopropyl acrylamide)

**Sample #:** P11451B-NIPAMSH

**Structure:**

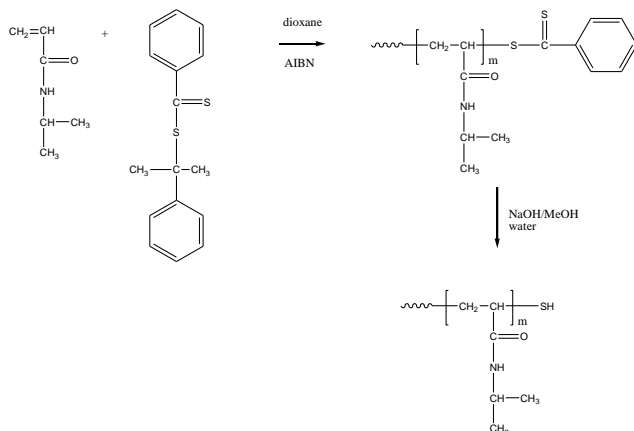


**Composition:**

Mn x 10 <sup>3</sup>	PDI
3.6	1.10

**Synthesis Procedure:**

The polymer was prepared by reversible addition-fragmentation chain transfer polymerization (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 water methanol, ethanol, DMF, and dioxane, not soluble in hexane.

**SEC of Sample:**

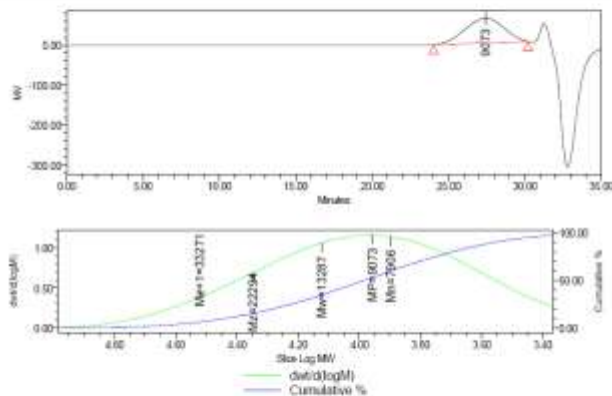
Empower

**GPC Default Individual Report**

Reported by User: System

Project Name: GPC\_Default

SAMPLE INFORMATION			
Sample Name:	P11451C	Acquired By:	System
Sample Type:	Broad Unknown	Date Acquired:	4/24/2013 3:38:05 PM
Vol:	1	Aug. Method Set:	method 1
Injection #:	7	Date Processed:	4/29/2013 1:48:02 PM
Injection Volume:	100.00 ul	Processing Method:	PEOcalibration
Run Time:	35.0 Minutes	Channel Name:	410
Sample Set Name:		Proc. Chnl. Descr:	



**GPC results of the Product:**

	Retention time	Mn	Mw	Mp	Mw/Mn
1	27.426	7906	11008	90.73	1.39