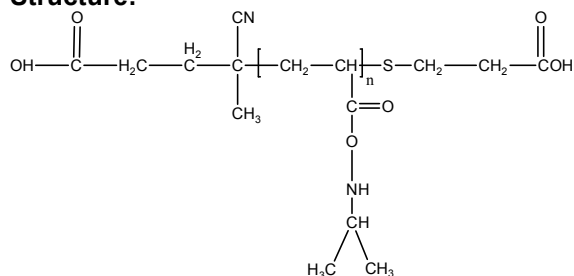


Sample Name: α,ω -dicarboxy terminated poly(N-isopropyl acrylamide)

Sample #: P9110A-NIPAM2COOH

Structure:

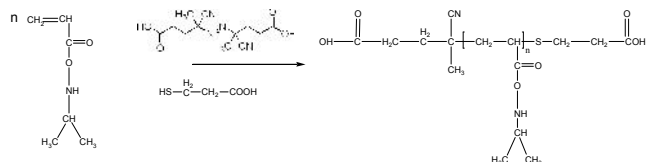


Composition:

| Mn x 10 ³ By acid base titration | PDI | Mn with reference to Polystyrene Calibration |
|--|-----|--|
| 5.0 | 1.4 | 19.0 |

Synthesis Procedure:

α,ω -dicarboxy Terminated Poly(N-isopropyl acrylamide) was prepared by free-radical polymerization of N-isopropyl acrylamide with a carboxyl containing chain-transfer agent. The final polymer was purified by fractionation and the scheme of the reaction is illustrated below:

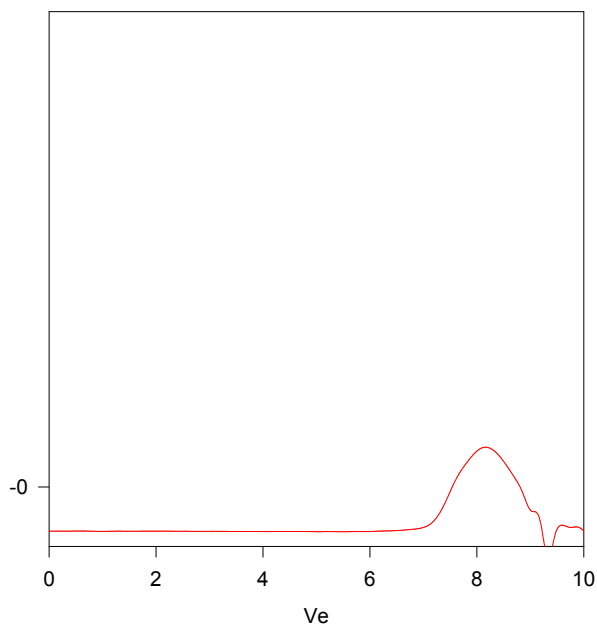


Characterization:

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.

SEC of Sample:

P9110A-NIPAM2COOH



Size Exclusion Chromatography profile of the product in DMF at 40 oC containing KBr 0.01M, w.r.t polystyrene calibration: dicarboxy terminated Poly(N-isopropyl acrylamide)

M_n = 5000 (by Titration) PI = 1.4

(Mn with reference to Polystyrene 19000)