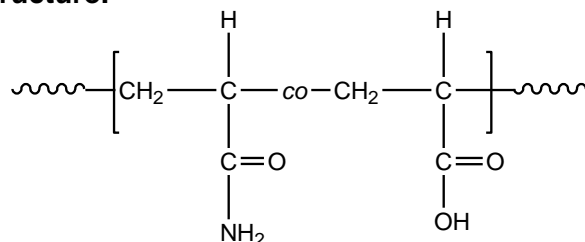


**Sample Name:** Random Copolymer  
Poly(Acrylamide-co-Acrylic Acid)

**Sample #:** P20174E-AMDAAran

**Structure:**



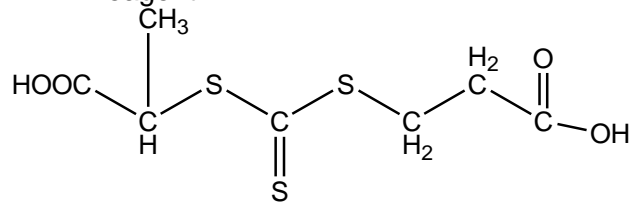
**Composition:**

Mn x 10 <sup>3</sup>	PDI
120.0	1.4
Ratio AMD:AA	40:60

**Synthesis Procedure:**

The polymer was prepared by RAFT process.

RAFT reagent:



**Characterization:**

The molecular weight and polydispersity index (PDI) were calculated by size exclusion chromatography (SEC) using water buffer solution. The copolymer composition was calculated by acid base titration.

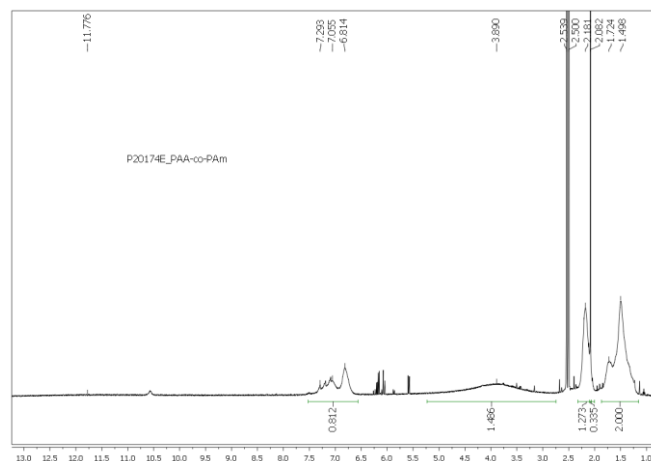
Eluent water compositions was:

Buffer NaHCO<sub>3</sub> 0.05M; NaNO<sub>3</sub> 0.1M; NaN<sub>3</sub>: 0.03 wt % and Triethanol amine :0.02M

Column : TSK 3300SWXL cat# 08541

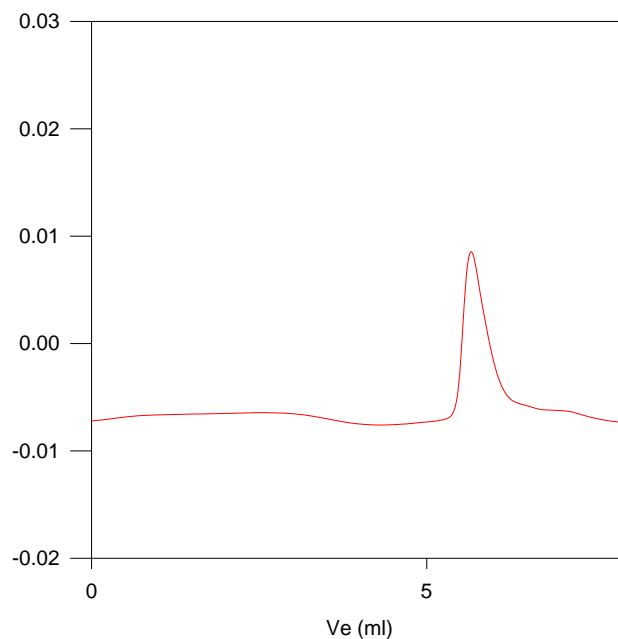
Conc: 2-3mg /ml of water. Higher concentration results in ambiguity in its analysis using such single column.

**<sup>1</sup>H NMR spectrum (500MHz, DMSO):**



**SEC elugram:**

**P20174E-AMDAAran**



Size exclusion chromatograph of random copolymer of Acrylamide and acrylic acid:

M<sub>n</sub> = 12,000 Mw: 170,000 Mw/Mn 1.4