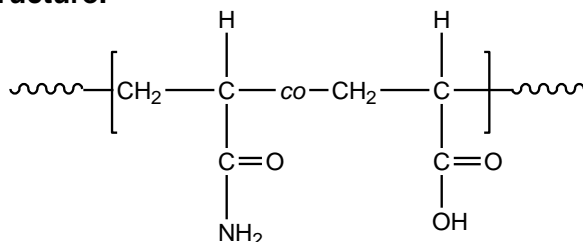**Sample Name:** Random Copolymer Poly(Acrylamide-*co*-Acrylic Acid)

Sample #: P20174A-AMDAAran

Structure:
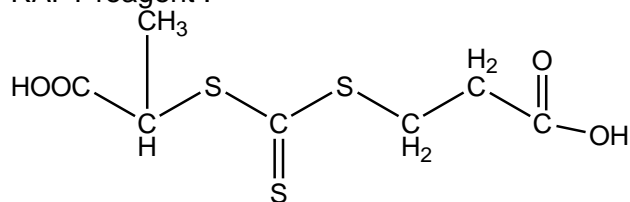

Composition:

Mn x 10^3	PDI
165.0	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.
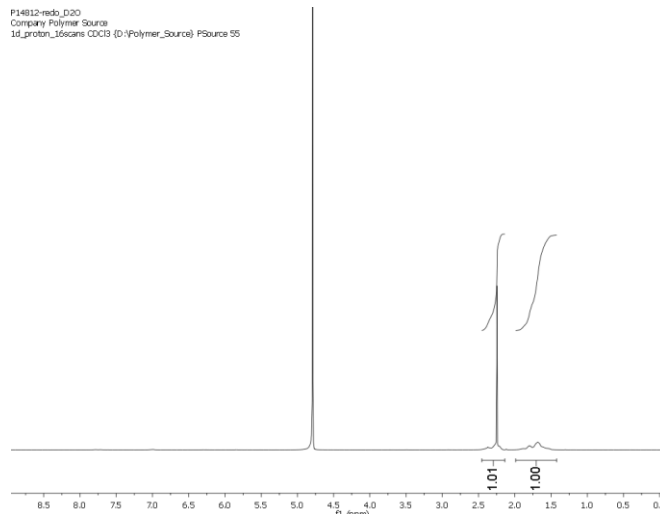
Eluent water compositions was:
Buffer NaHCO3 0.05M; NaNO3 0.1M; NaN3: 0.03 wt % and Triethanol amine :0.02M
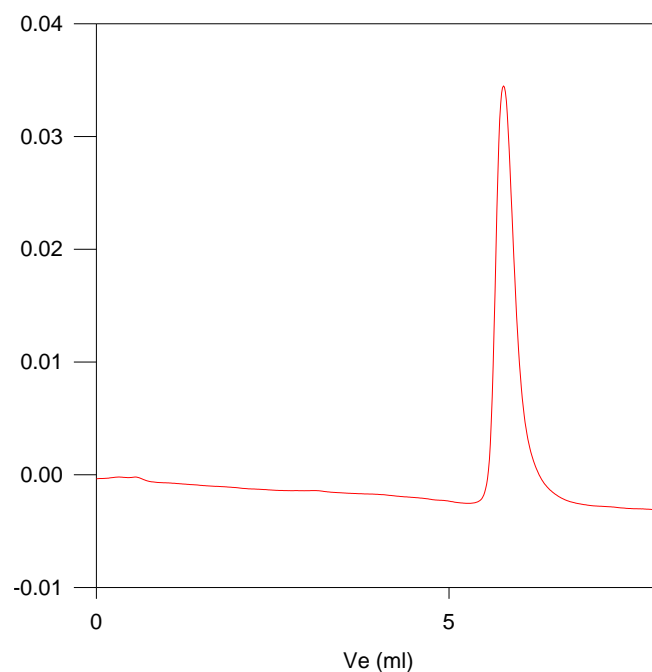Column : TSK 3300SWXL cat# 08541

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

^{1}H NMR spectrum (500MHz, D$_2$O):

SEC elugram:
P14812-AMDAAran

Ve (ml)

Size exclusion chromatograph of random copolymer of Acrylamide and acrylic acid:
M$_n$= 140,000 Mw: 210,000 Mw/Mn 1.5