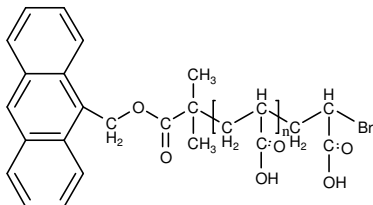


Sample Name: Anthracene Terminated Poly(acrylic acid)

Sample #: P14975-AA-An

Structure:

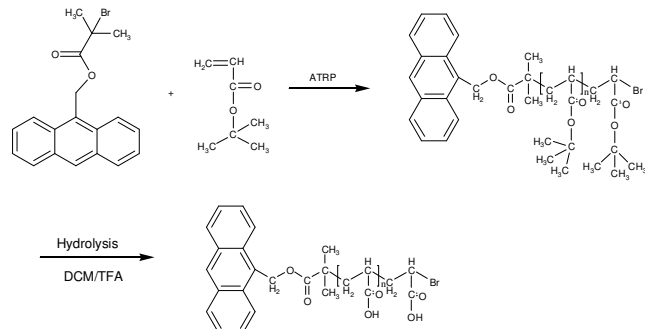


Composition:

Mn x 10 ³	PDI
4.2	1.31

Synthesis Procedure:

Anthracene ended polyacrylic acid is prepared via atom transfer radical polymerization of tert butyl acrylate using an anthracene-containing initiator, 9-anthracenemethyl-2-bromoisobutyrate, followed by hydrolysis.



Characterization:

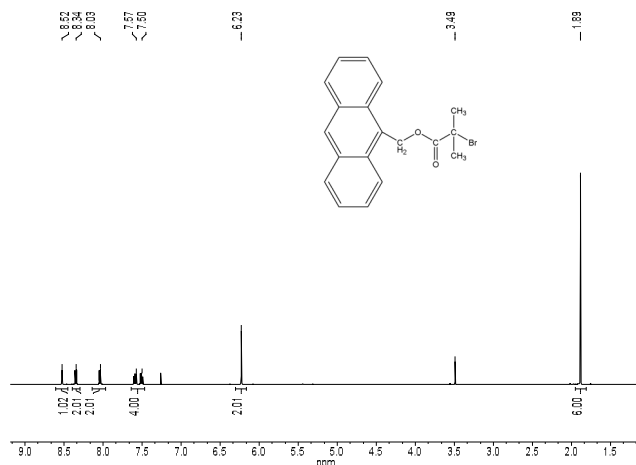
The polymer was characterized by SEC and ¹H NMR.

Functionality: functionality of the obtained polymer was determined by proton NMR.

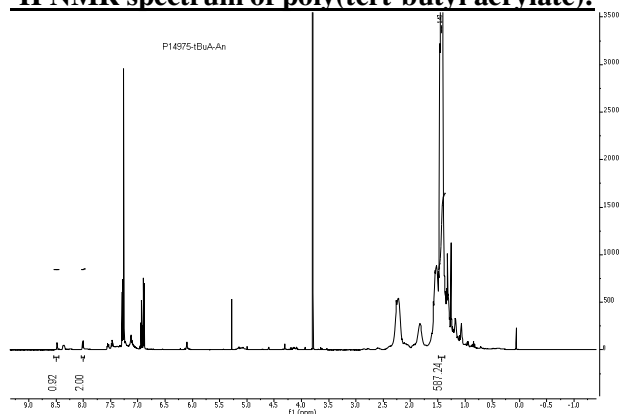
Solubility:

Anthracene terminated PAA is soluble in water and methanol. It precipitates from hexane.

¹H NMR spectrum of initiator:



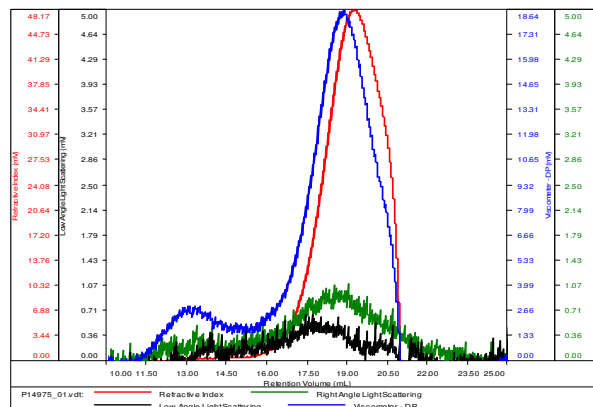
¹H NMR spectrum of poly(tert-butyl acrylate):



SEC of poly(tert-butyl acrylate) before hydrolysis:

SAMPLE ID: P14975-tBuA-An

Conc (mg/mL)	8.8438
dn/dc (mL/g)	0.0500
Method	ps80k-21-Jan2016-DMF-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P14975_01.vdt	7,549	9,945	6,619	1.317	0.0590

After hydrolysis of ester: PAA-An Mn: 4,200; Mw: 5,500