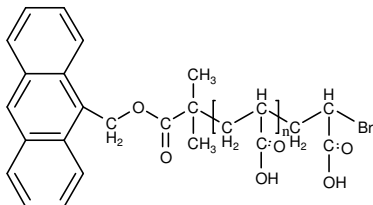


Sample Name: Anthracene Terminated
Poly(acrylic acid)

Sample #: P14968-AA-An

Structure:

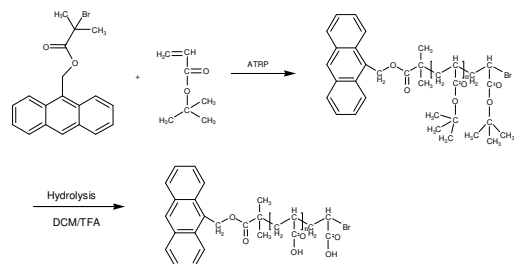


Composition:

Mn x 10 ³	PDI
7.8	1.16

Synthesis Procedure:

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

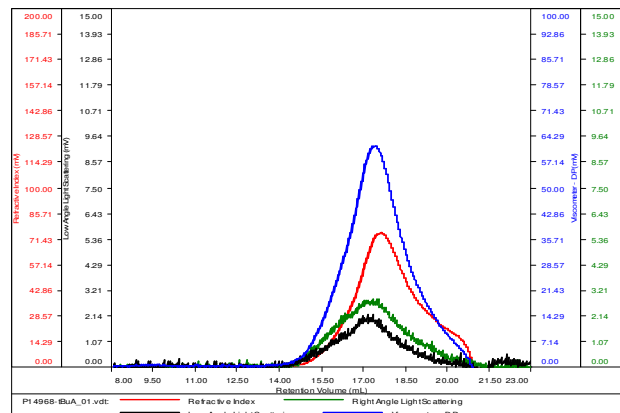
Solubility:

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

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

SAMPLE ID: P14968

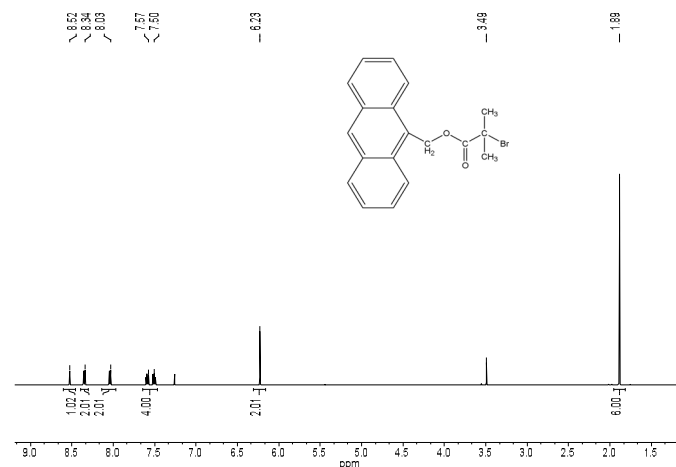
Conc (mg/mL)	14.3708
dn/dc (mL/g)	0.0500
Method	ps80k21Jan2016-DMF-0000.vcm
Solvent	DMF-w 0.023M LiBr
Column	PSS



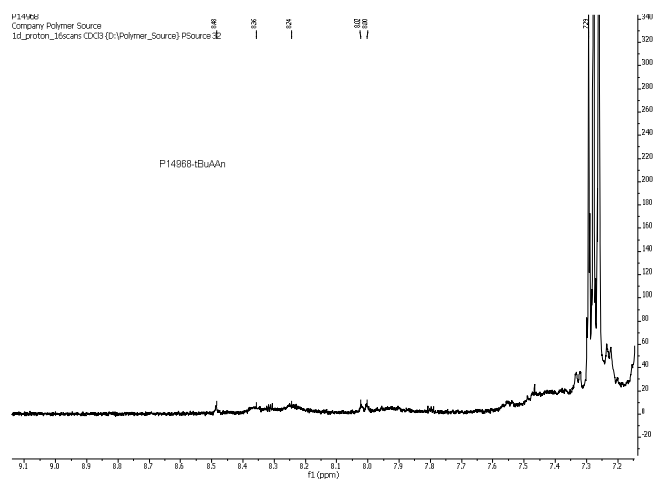
Sample	Mn	Mw	Mp	Mw/Mn	IV
P14968-IBuA_01.vdt	14,057	16,338	13,189	1.162	0.1184

After hydrolysis of ester: PAA-An Mn: 7,800; Mw: 9,100

¹H NMR of initiator:



¹H NMR of anthracene terminated tBuA:



¹H NMR of anthracene terminated PAA:

