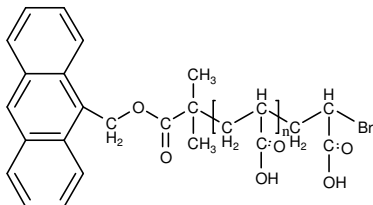


**Sample Name: Anthracene Terminated Poly(acrylic acid)**

**Sample #: P14969-AA-An**

**Structure:**

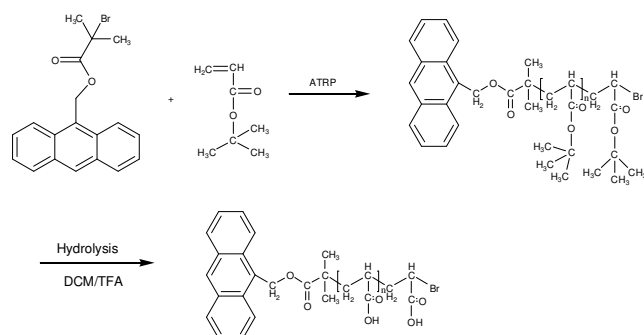


**Composition:**

Mn x 10 <sup>3</sup>	PDI
7.3	1.35

**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:**

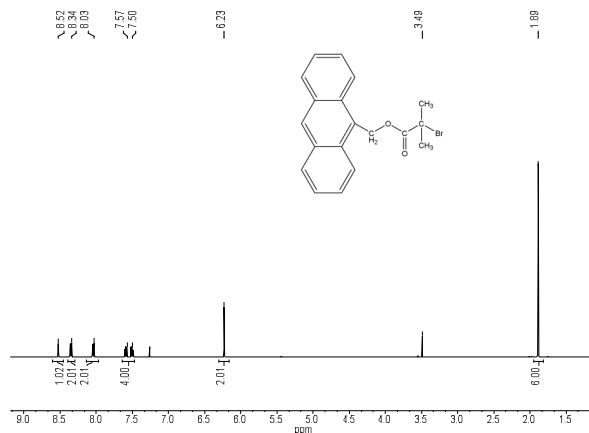
The polymer was characterized by SEC and <sup>1</sup>H NMR.

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

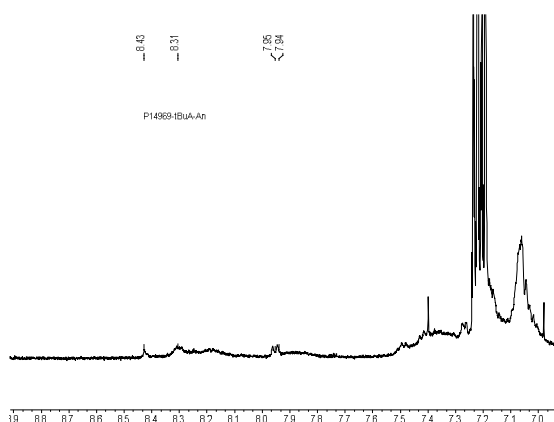
**Solubility:**

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

**<sup>1</sup>H NMR of initiator:**



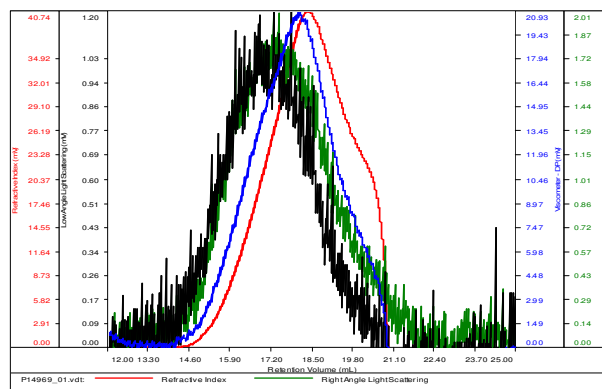
**<sup>1</sup>H NMR of Anthracene Terminated tBuA:**



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

**SAMPLE ID: P14969-tBuA-An**

Conc (mg/mL)	6.7995
dn/dc (mL/g)	0.0650
Method	ps80k-21Jan2016-DMF-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P14969_01.vdt	12,305	16,469	10,719	1.338	0.1008

**After hydrolysis of ester: PAA-An Mn: 7,300; Mw: 9,900**