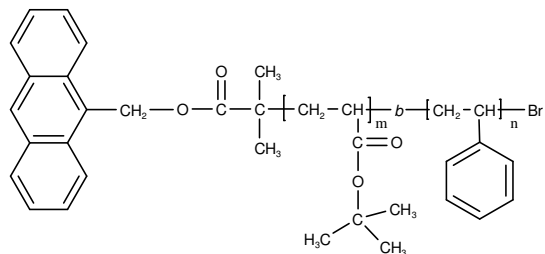


Sample Name: ω -Anthracene Terminated Poly(styrene-*b*-tert-butyl acrylate) Diblock Copolymer

Sample #: P14976-StBuA-An

Structure:

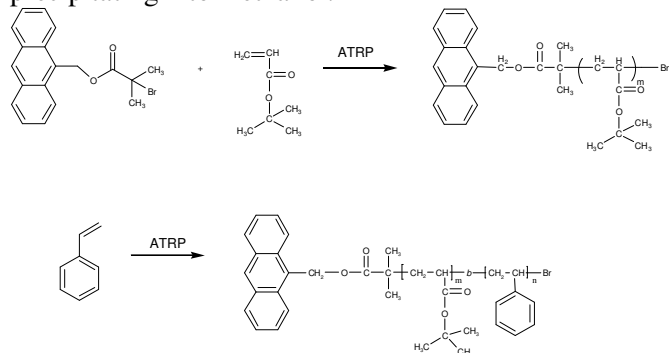


Composition:

Mn $\times 10^3$ S- <i>b</i> -tBuA	PDI
23.0- <i>b</i> -7.5	1.38

Synthesis Procedure:

Anthracene terminated poly(styrene-*b*-tert-butyl acrylate) diblock copolymer was synthesized by using ATRP polymerization with sequence addition of tert-butyl acrylate followed by styrene using an anthracene-containing initiator, 9-anthracenemethyl-2-bromoisobutyrate. The polymer was obtained by precipitating into methanol.



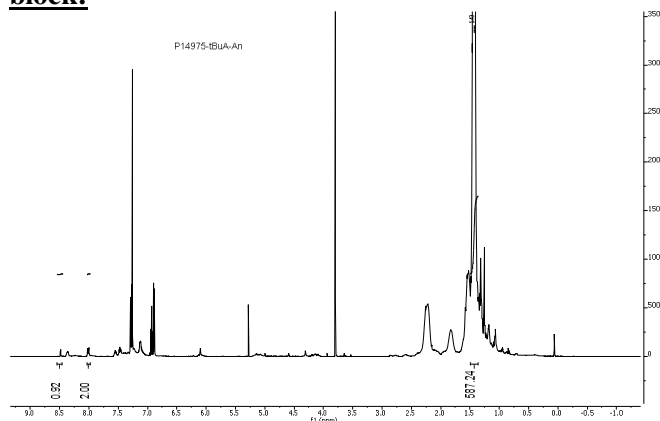
Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a light scattering and refractive index detector.

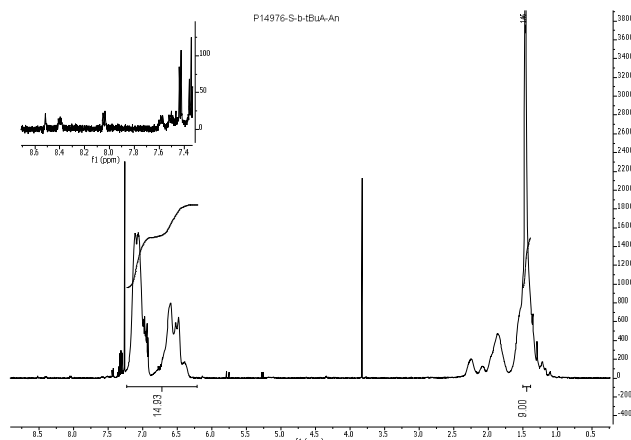
Solubility:

Polymer is soluble in THF, toluene and CHCl₃. It precipitates from methanol, ethanol and hexanes.

¹H NMR of the first poly(tert-butyl acrylate)-An block:



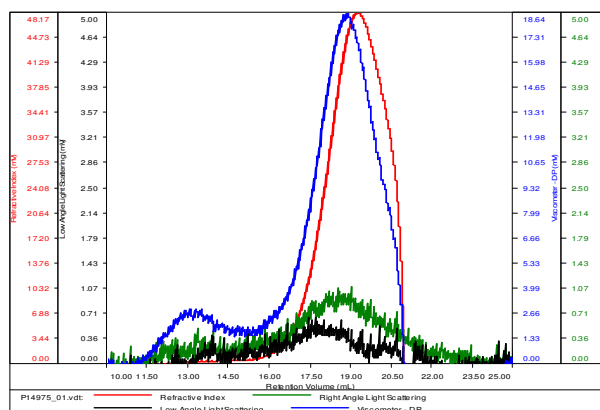
¹H NMR spectrum of the block copolymer StBuA-An:



SEC of the first poly(tert-butyl acrylate) block:

SAMPLE ID: P14975-tBuA-An

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

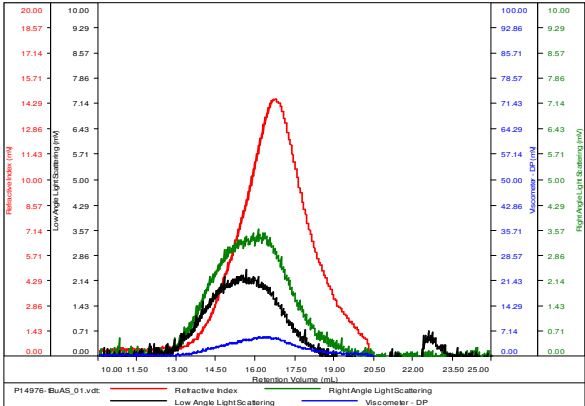


Sample	Mn	Mw	Mp	Mw/Mn	IV
P14975_01.vdt	7,549	9,945	6,619	1.317	0.0590

SEC of the diblock copolymer StBuA-An:

SAMPLE ID: P14976-StBuA

Conc (mg/mL)	1.2009
dn/dc (mL/g)	0.1300
Method	ps80k-21Jan2016-DMF-0000.vcm
Solvent	DMF w 0.023M LiBr
Column	PSS



Sample	Mn	Mw	Mp	Mw/Mn	IV
P14976-tBuAS_01.vdt	30,350	41,869	31,153	1.380	0.1474