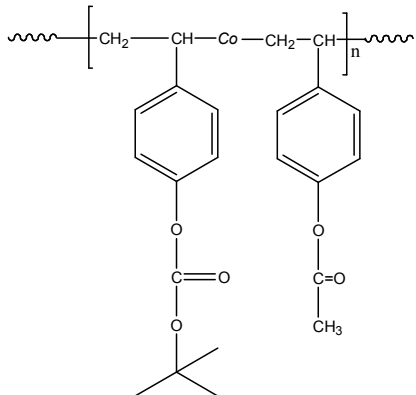


Sample Name:

Random copoly (4-((tert-butoxycarbonyl) oxy) styrene-co-4-acetoxy styrene)

Sample #: P16116B-4BocS4AcS ran

Structure:

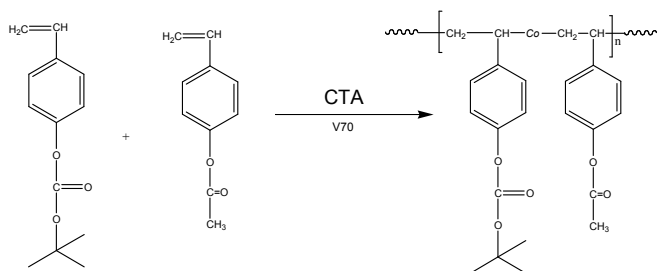


Composition:

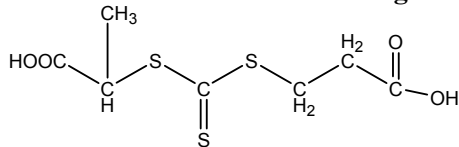
Mn x 10 ³	22.5
PDI	1.10
4BocS: 4AcS molar ratio	19: 81

Synthesis Procedure:

Random copolymer (4-((tert-butoxycarbonyl) oxy) styrene-co-4-acetoxy styrene) is synthesized by RAFT copolymerization of 4-((tert-butoxycarbonyl) oxy) styrene and 4-acetoxy styrene and the reaction scheme is shown below.



Structure of chain transfer reagent:



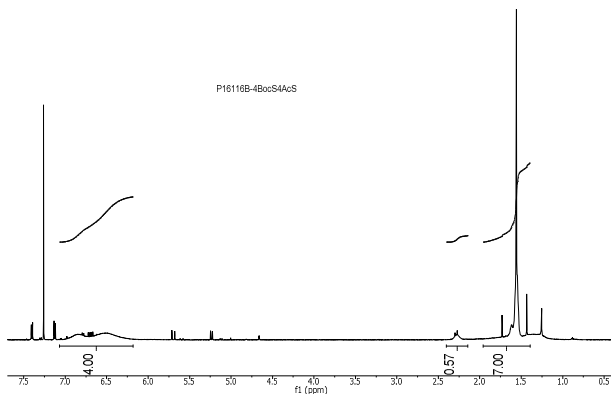
Characterization:

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography in THF.

Solubility:

Poly (4-Boc-styrene) is soluble in DMF, THF, toluene and CHCl₃. It precipitates from methanol, ethanol, water and hexanes.

NMR of Homopolymer:

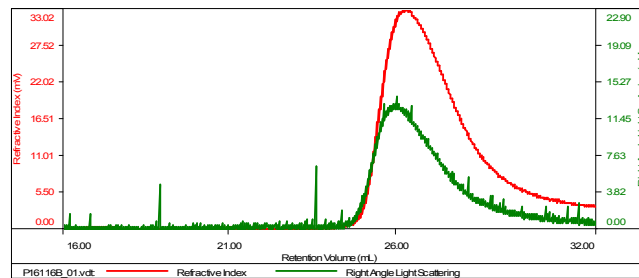


SEC of Homopolymer:

Sample ID:

P16116B-4BocS4AcetoxyS

Concentration (mg/mL)	3.6433
Sample conc (mL/g)	0.1850
Method File	PS80K-Oct2016-2.0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P16116B_01.vdt	22,583	24,634	1.091	0.2451	26,420