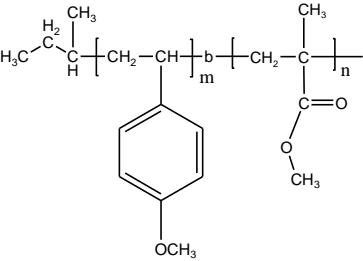


Sample Name:  
Poly(4-Methoxy styrene-b-Methylmethacrylate)

Sample #: P18303-4MeOSMMA

Structure:



Composition:

Mn x 10 <sup>3</sup> 4MeOS-b-MMA	Mw/Mn (PDI)
41.0-b-150.0	1.07

Synthesis Procedure:

Poly(4- methoxy styrene-b-MMA) is prepared by living anionic polymerization by sequence addition of 4-methoxyl styrene followed by methylmethacrylate.

**Characterization** Block was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The final block copolymer composition was calculated from <sup>1</sup>H-NMR spectroscopy by comparing the peak area of the 4 methoxy styrene protons at 6.3-7.2 ppm with the peak area of 4-methoxy styrene at 3.7ppm and MMA –Methyl ester at 3.6 ppm .

**Solubility:** Polymer is soluble in THF, acetone  
**Figure:**<sup>1</sup>H NMR spectrum of the sample

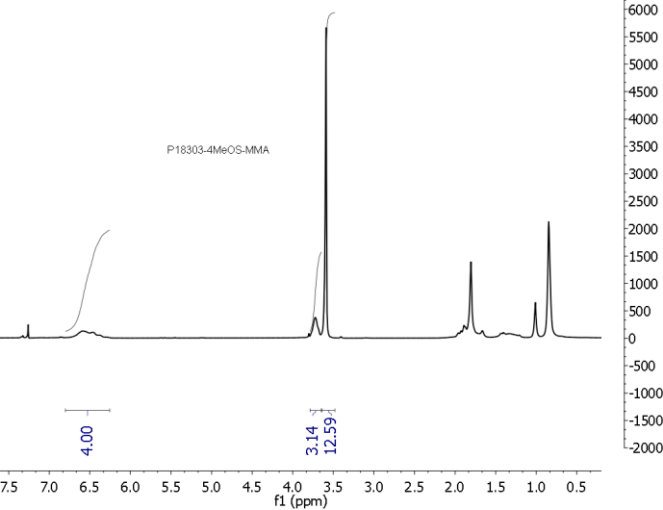
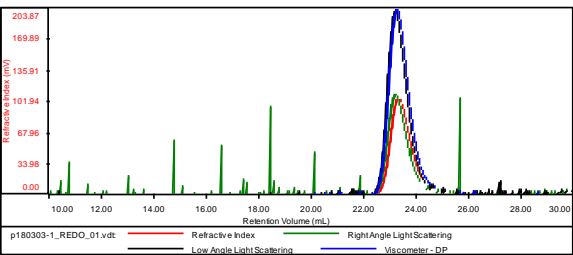


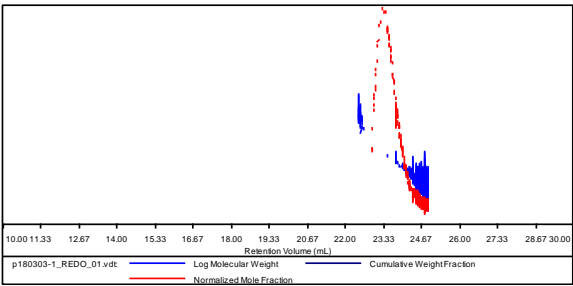
Figure: SEC profile of the block copolymer

Sample ID: P18303-1-4MeOS

Concentration (mg/mL)	2.8928
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-NOV-2013-0000.vcm
Column Set	3x PL 1113-6300
System	System 1

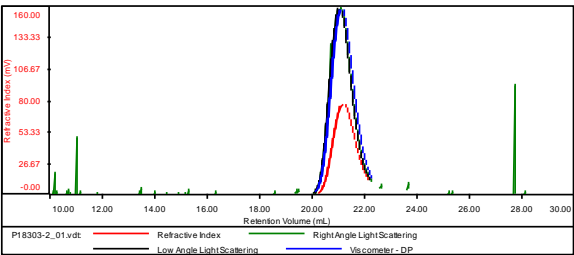


Sample	Mn	Mw	Mp	Mw/Mn	IV
p1830303-1_REDO_01.vdt	41,235	43,787	44,365	1.062	0.2178



Sample ID: P18303-4MeOSMMA

Concentration (mg/mL)	4.5509
Sample dn/dc (mL/g)	0.1000
Method File	PS80K-NOV-2013-0001.vcm
Column Set	3x PL 1113-6300
System	System 1



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18303-2_01.vdt	191,640	204,337	213,476	1.066	0.4811

