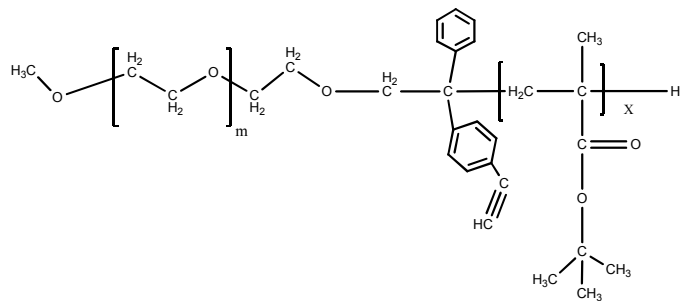


Sample Name:

Poly(ethylene oxide-*b*-tert butylmethacrylate)
bearing (4'-ethynyl phenyl-phenyl)ethylene at the
junction of EO and tBuMA blocks.

Sample #: **P18365-EO(acetylene)tBuMA**

Structure:



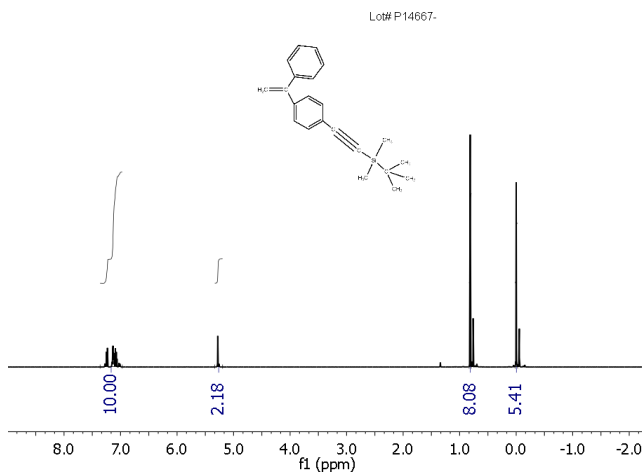
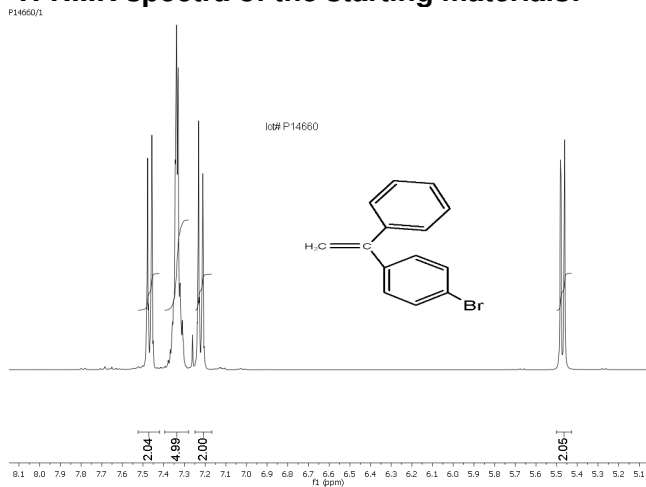
Composition of PEO-*b*-PtBuMA:

| | |
|---------------------------|-----|
| $M_n \times 10^3$ (g/mol) | PDI |
| 2.5- <i>b</i> -3.0 | 2.0 |

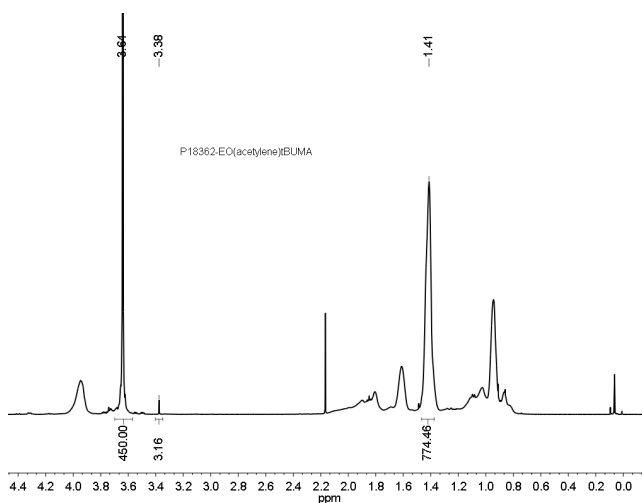
Synthesis and Characterization:

The polymer was synthesized by anionic living polymerization, and characterized by ^1H NMR spectroscopy and SEC chromatography.

^1H -NMR spectra of the starting materials:



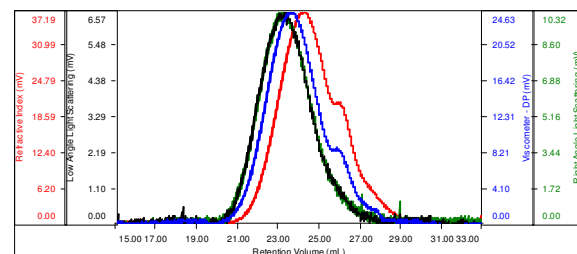
^1H -NMR spectrum of the PEO-*b*-PtBuMA:



SEC-LS elugram (eluent: THF):

Sample ID: P18362-EO-Acetylene-tBuMA

| | |
|-----------------------|----------------------------|
| Concentration (mg/mL) | 8.6562 |
| Sample dn/dc (mL/g) | 0.0840 |
| Method File | PS80K-March7-2014-0000.vcm |
| Column Set | 3x PL 1113-6300 |
| System | System 1 |



| Sample | Mn | Mw | Mp | Mw/Mn | IV |
|---------------|--------|--------|--------|-------|--------|
| p18362_01.vdt | 17,952 | 37,212 | 32,185 | 2.073 | 0.1895 |