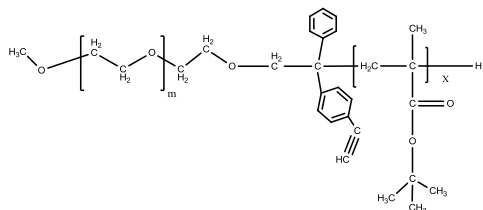


Sample Name:

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

Sample #: **P18372-EO(acetylene)tBuMA**

Structure:



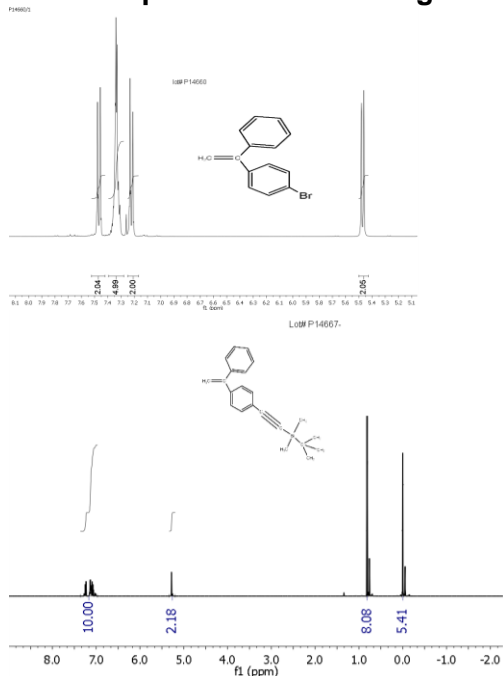
**Composition of PEO-*b*-PtBuMA:**

$M_n \times 10^3$ (g/mol)	PDI
5.0- <i>b</i> -10.0	1.8

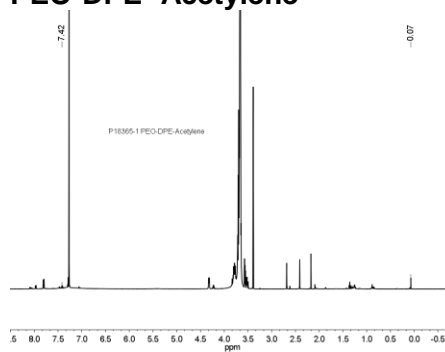
### Synthesis and Characterization:

The polymer was synthesized by anionic living polymerization, and characterized by  $^1\text{H}$  NMR spectroscopy and SEC chromatography.

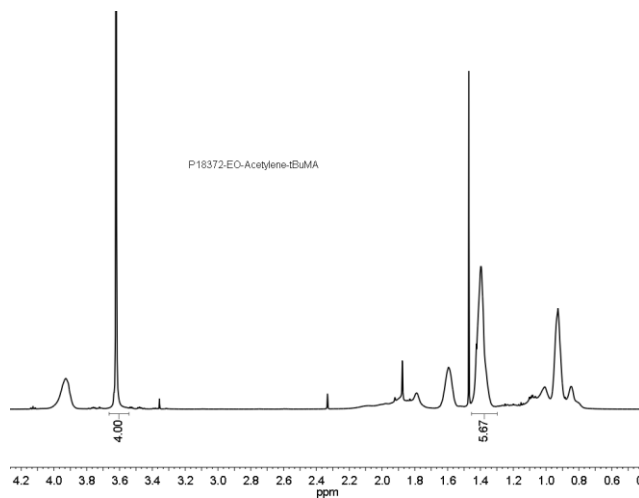
### $^1\text{H}$ -NMR spectra of the starting materials:



### $^1\text{H}$ -NMR spectrum of the PEO-DPE- Acetylene

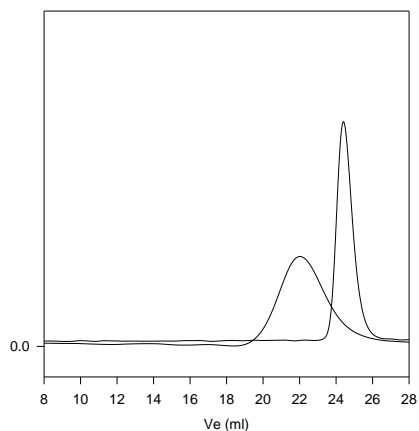


### PEO-*b*-PtBuMA:



### SEC;

**P18372-EO(acetylene)-tBuMA**



Size exclusion chromatography of the product)

— PEO first block :  $M_n=5,000$   $PI=1.15$

PEO-(Acetylene)-tBuMA:  $M_n$  5000-*b*-10,000  $M_w/M_n$  1.8