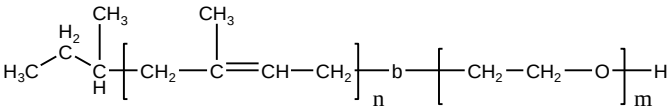
Sample Name:
Poly(1,4-isoprene)-b-poly(ethylene oxide)

Sample #: **P42183-IPEO**
(polyisoprene block is rich in 1,4 microstructure)

Structure:



Composition:

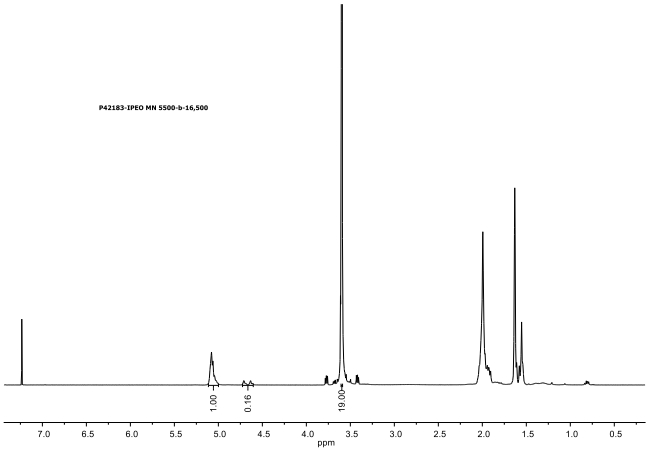
Mn x 10^3 [PIP–*b*–PEO]	Mw/Mn (PDI)
5.5–*b*–15.0	1.02

Synthesis Procedure:
Poly(1,4-isoprene)-block-poly(ethylene oxide) was synthesized by anionic polymerization process.

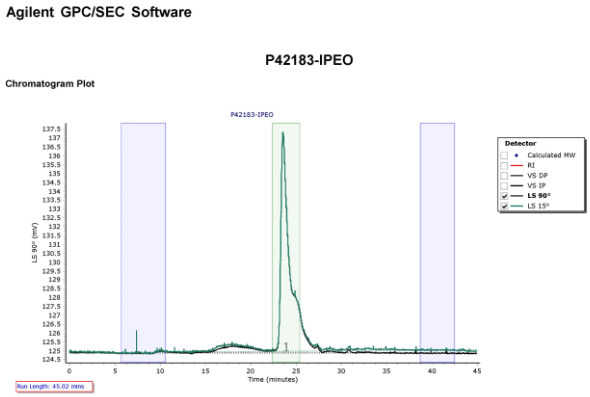
Characterization:
The product was characterized by size exclusion chromatography (SEC) and ^{1}H NMR spectroscopy.

Solubility:
Poly(isoprene-b-ethylene oxide) is soluble in THF, chloroform, and toluene. The polymer has variable solubility in hexane, methanol, ethanol and water depending on its molecular weight composition.

^{1}H NMR spectrum of the sample:



SEC chromatogram of the diblock copolymer:



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	21247	20411	20459	20506	20552	20639	1.002