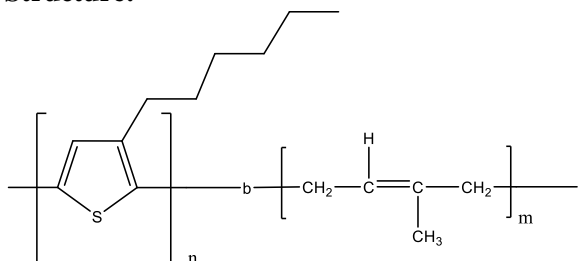


Sample Name:

**Poly(3-hexylthiophene-2,5-diyl)-b-poly(1,4-isoprene)**

Sample #: **P13240-3HTIP**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup> 3HT-b-IP	PDI	Regioregularity of P3HT
19.5-b-3.0	2.48	~90% (H-T)

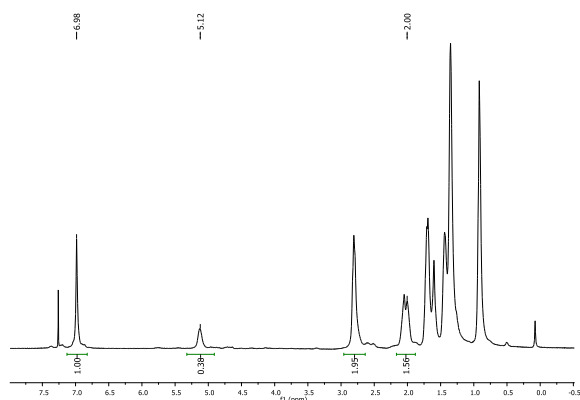
**Characterization:**

The molecular weight and polydispersity index (PDI) are obtained by size exclusion chromatography (SEC) in THF equipped with refractive and light scattering detectors. Three SEC columns from Supelco (G6000-4000-2000 HXL) were used with triple detectors from Viscotek Co. The molecular weight is calculated based on polystyrene standards. The NMR spectrum was recorded in deuterated chloroform to determine the composition of copolymer.

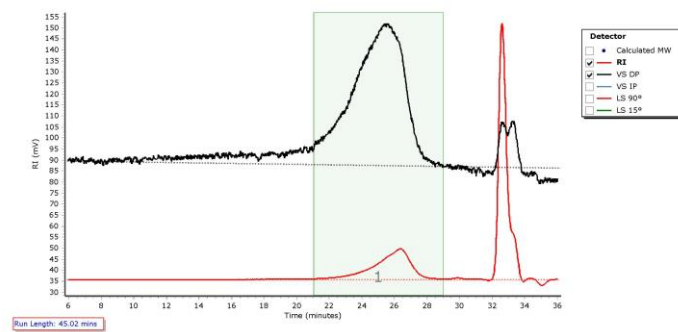
**Solubility:**

Poly(3-hexylthiophene-2,5-diyl)-b-poly(1,4-isoprene) is soluble in THF and CHCl<sub>3</sub>.

**<sup>1</sup>H NMR of Block copolymer:**



**SEC profile of the block polymer:**



Molecular Weight Averages							PD
Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	
Peak 1	18080	22558	55992	194317	405887	153727	2.482