# <u>Sample Name</u>: Poly(3-hexylthiophene-2,5-diyl)-b-poly(deuterated methyl methacrylate-d8)

## Sample #: P43281A-3HT-d8MMA

#### **Structure:**

## **Composition:**

Mn x 10 <sup>3</sup> (3HT-b-d8MMA)	PDI
9.5-b-10	1.17

# Regioregularity of P3HT: ~90% (H-T)

# **Purification of the polymer:**

The crude polymer was recovered from reprecipitation into methanol. The inorganic salts were removed by using a Soxhlet extraction with Methanol and homopoly hecyl thiophene was removed by extraction with hot cyclohexane. The pure polymer was dissolved in chloroform and precipitated in cold acetone/Hexane.

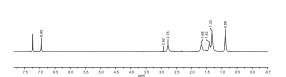
#### **Characterization:**

The product was characterized by size exclusion chromatography (SEC) and <sup>1</sup>H NMR data analysis.

#### **Solubility:**

Poly(3-hexyl thiophene-b-MMA-d8) is soluble in THF, Toluene and CHCl<sub>3</sub>. It precipitates from methanol and hexane.

# <u>H NMR spectrum of poly(3-hexylthiophene-b-MMA-d8):</u>



## **D NMR spectrum of the Sample:**

16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 -10 ppm

### **SEC elugram of the polymer:**

