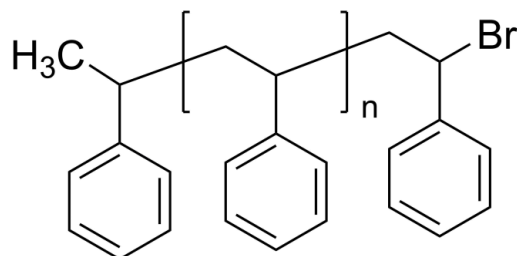


**Sample Name:** Poly(styrene),  $\omega$ -(secondary)bromo-terminated

**Sample #:** P41873-SBr

**Structure:**

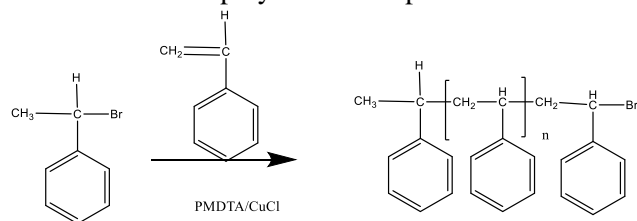


**Composition:**

Mn x 10 <sup>3</sup>	PDI
27.0	1.35

**Synthesis Procedure:**

Bromo terminated polystyrene was prepared by controlled radical polymerization process.



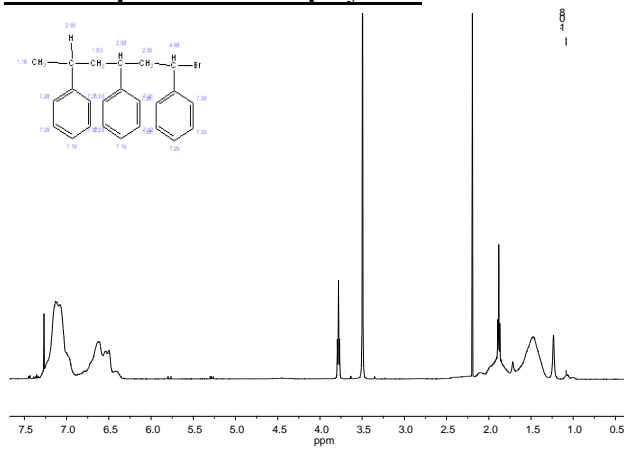
**Characterization:**

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was verified by FTIR/H NMR depending on the molecular weights. Furthermore, the quantitative yield of the end functionalization was also proven in the extinction of the polymer in the ATRP process to synthesize different di-block copolymers.

**Solubility:**

Polymer is soluble in THF, CHCl<sub>3</sub> and toluene. It is precipitated out from methanol, ethanol, hexane, and ether.

**HNMR spectrum of the polymer:**

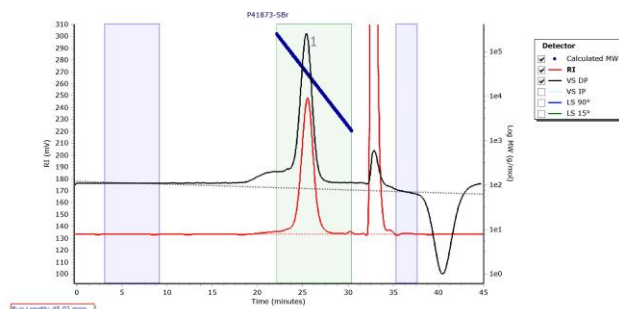


**SEC elugram of the Sample:**

Agilent GPC/SEC Software

P41873-SBr

Chromatogram Plot



Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	31473	27042	37135	53373	88623	47377	1.373