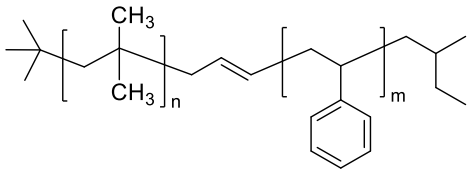
Sample Name: **Poly(isobutylene-b-styrene)**

Sample #: **P42329-IbS**

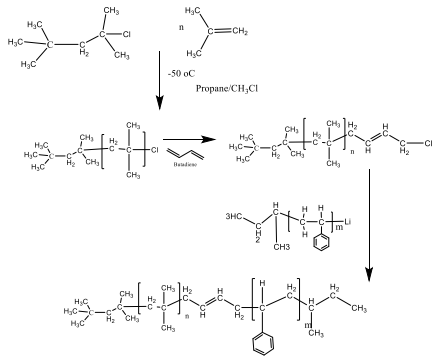
Structure:



Composition:

Mn × 10^3 Ib-b-S	Mw/Mn (PDI)
5.3-b-4.3	1.8

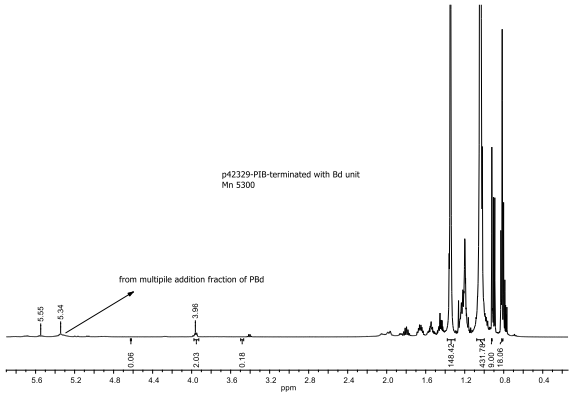
Synthesis Procedure:
The following reaction scheme shows how the product was prepared:



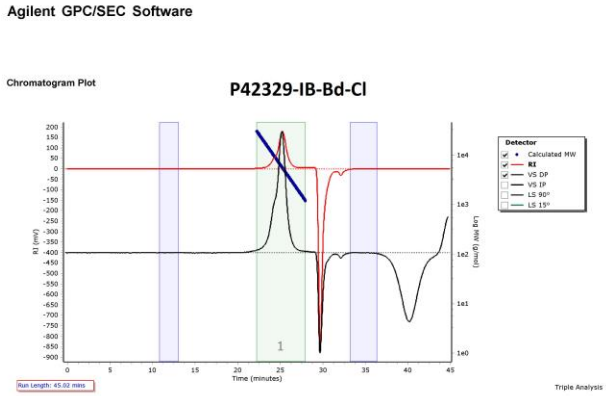
Characterization: The product was characterized by size exclusion chromatography (SEC) and ^{1}H NMR.

Solubility:
Poly(isobutylene-b-S) block copolymer is soluble in THF, toluene and hexane.

HNMR Spectrum of PIB-Bd-Cl:



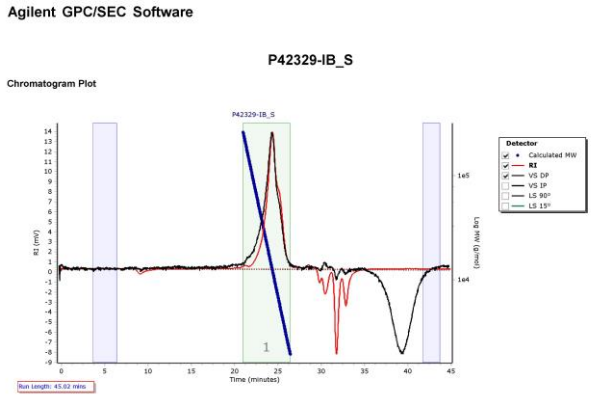
SEC profile of the First Block of Poly isobutylene Cl terminated with a unit of Butadiene spacer:



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	5599	5321	6505	8160	10777	7602	1.223

SEC profile after linking Polystyrene Block:



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	12269	9609	17780	46538	116327	34101	1.85