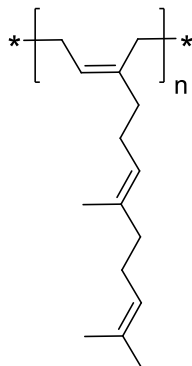Sample Name:

Poly(1,4-farnesene)

Sample #: **P43229-Farne**

Structure:
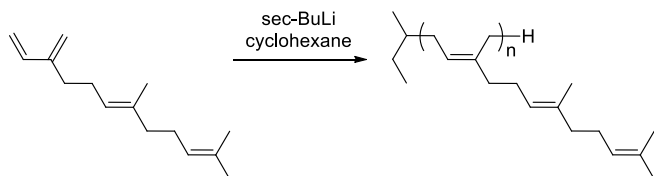

Composition:

$M_n \times 10^3$ (g/mol)	M_w/M_n
1.2	1.10

Dp: 6

Synthesis:

1,4-Polyfarnesene was synthesized by anionic living polymerization of β-farnesene in cyclohexane using sec-BuLi as an initiator.
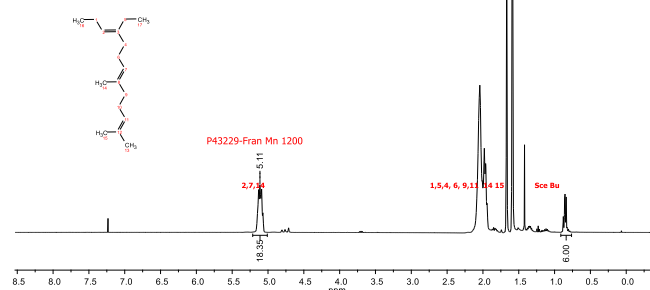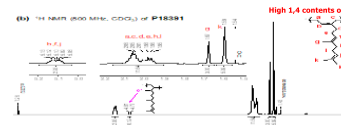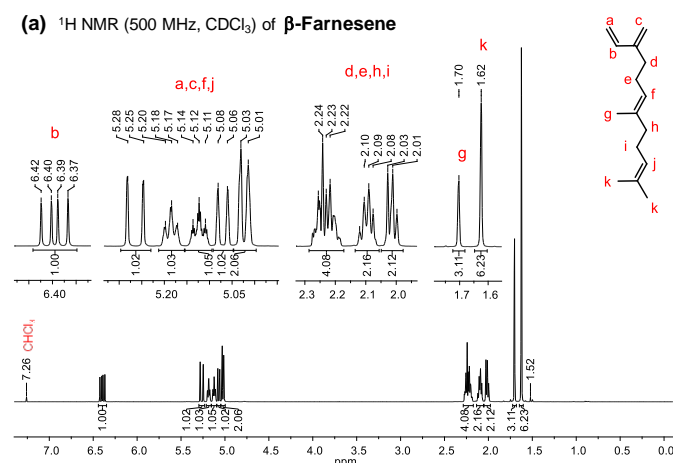

Characterization:

The absolute molecular weight and polydispersity index (PDI) were determined by size exclusion chromatography (SEC) using light scattering (LS) detector. SEC analysis was performed on a Varian ProStar liquid chromatograph equipped with UV-vis, RI and LS triple detector from Viscotec, three SEC columns from Supelco (G6000-4000-2000 HXL), and using THF as an eluent.
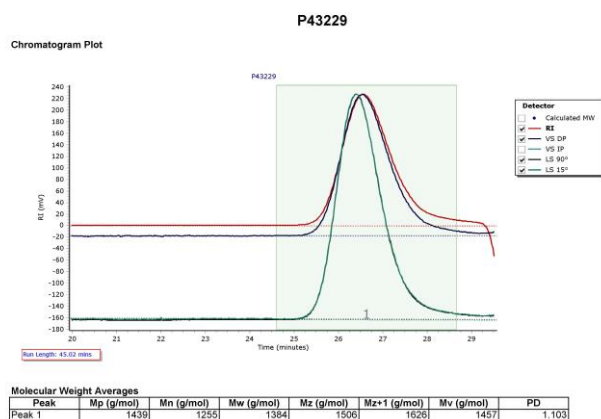
¹H NMR spectra:(a) β-farnesene, (b) polyfarnesene

1,4-Polyfarnesene contains ≤ 6% of 1,2-polyfarnesene.

SEC elugram of polyfarnesene:

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	1439	1255	1384	1506	1626	1457	1.103