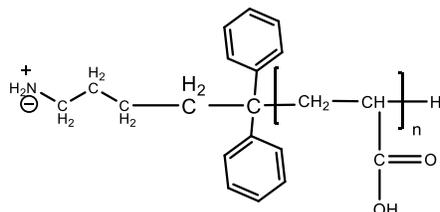


Sample Name:
Poly(acrylic acid), α -amino-terminated

Sample #: P43841-AANH2

Structure:

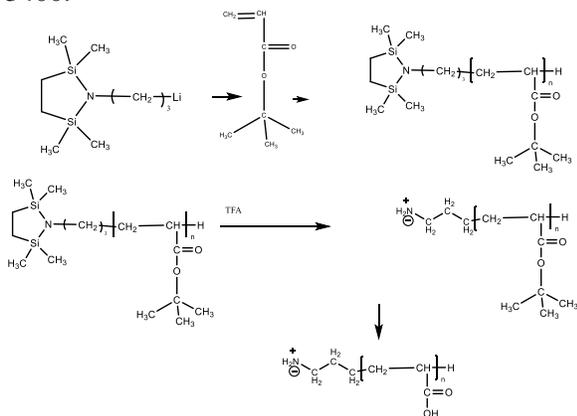


Composition:

$M_n \times 10^3$	PDI
0.35	1.2
Dp: 5 units	

Synthesis Procedure:

α -amino terminated poly tert-butylacrylate was synthesized by anionic living polymerization using NH₂ protected initiator. Tert-butyl ester hydrolyse to COOH. The details please see our published results. Varshney, S. K.; Song, Z.; Zhang, Jian-Xin.; Jerome, Robert. Rapid Communication; J. Polym. Sci. Part A, 2006, 44, 3400.



Characterization:

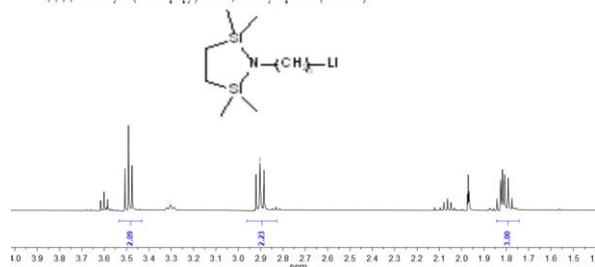
The product was characterized by size exclusion chromatography (SEC) and ¹H NMR. Hydrolysis of tert-butyl ester was monitored by disappearance of ester absorbance at 1365cm⁻¹.

Solubility:

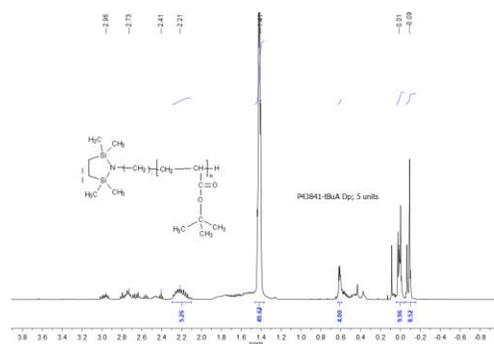
Polymer is soluble in THF, methanol and water.

H NMR spectrum of the initiator:

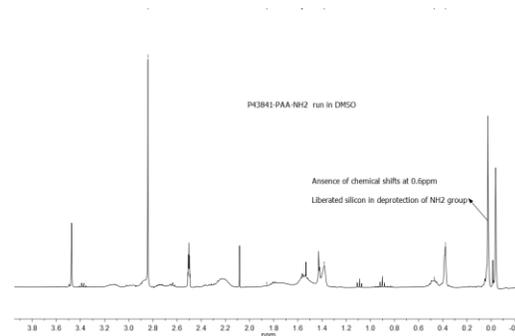
2,2,5,5-tetramethyl-1-(3-chloropropyl)-1-aza-2,5-disilacyclopentane (TMCPAD)



HNMR spectrum of tBuA NH2 Protected:



H NMR spectrum of the Sample:



FTIR of the protected and deprotected of NH2 validated by FTIR:

