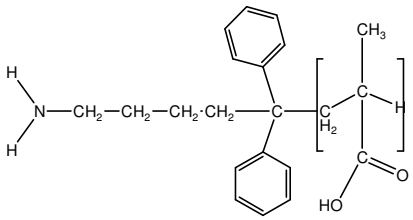
Sample Name:
Amino Terminated Poly Methacrylic acid

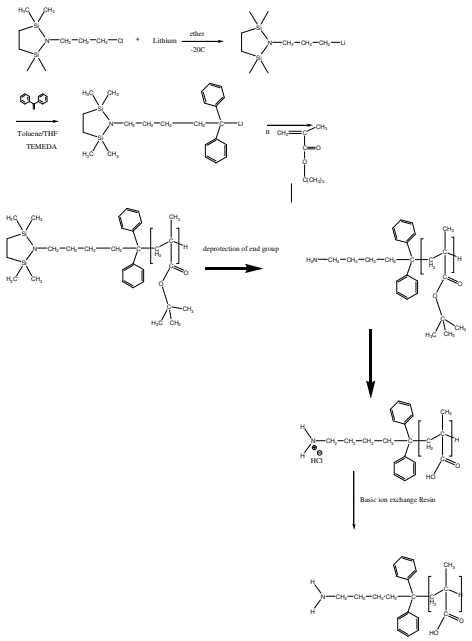
Sample #: **P19091A- MAANH2**



Composition:

Mn x 10^3	PDI
5.0	1.13

Synthesis Procedure:
Amino terminated poly tert-butylacrylate was synthesized by anionic living polymerization using NH2 protected initiator. 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.



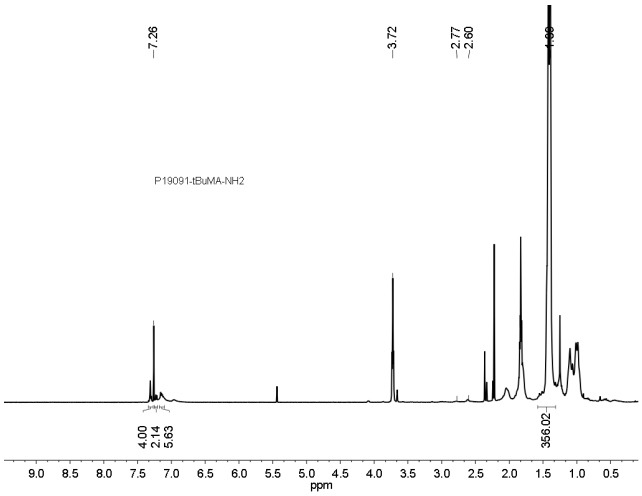
Characterization:
By SEC and HNMR . Removal of the protecting group was confirmed by UV spectroscopy and the degree of functionality was confirmed by titration with $HClO_4$ using crystal violet as the indicator.

Hydrolysis of tert-butyl ester was monitored by disappearance of ester absorbance at 1365cm-1.

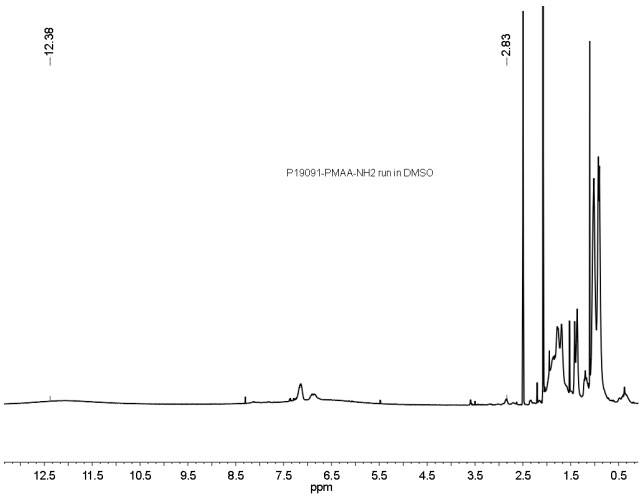
Purification :
After Hydrolysis the product was precipitated in hexane/ether dried at room temperature under vacuum. The dried product was dissolved in water/methanol mixture and passed through ion exchange resin to remove any charge on terminal amino ends group. The obtain polymer solution was dried under vacuum .

Solubility: Polymer is soluble in THF, methanol .

H NMR of tBuMA-NH2:



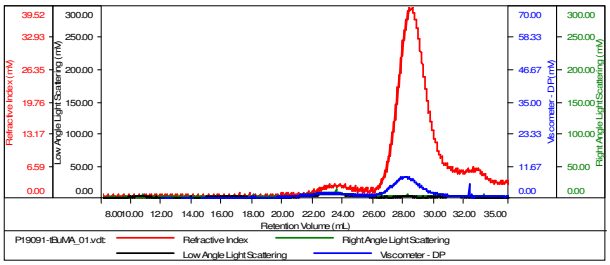
HNMR of PMAA run in DMSO



SEC of Sample: In ester form

Sample ID: P19091-tBuMA-NH2

Concentration (mg/mL)	3.0430
Sample dn/dc (mL/g)	0.0850
Method File	PS80K-Jan22-2015-0003.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	MW Number Average (Da)	MW Weight Average (Da)	MW at Peak (Da)	Polydispersit	Intrinsic Viscosity (dL/g)
P19091-tBuMA_01.vdt	8,213	9,335	8,173	1.137	0.1129