

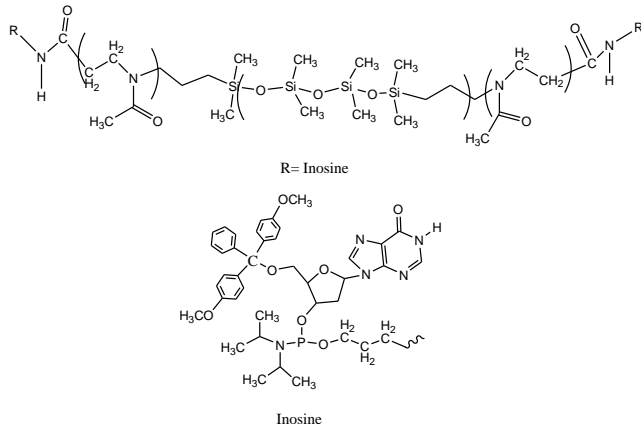
Sample Name:

Inosine end terminated Poly(2-methyloxazoline-b-dimethylsiloxane-b-2-methyloxazoline) Triblock Copolymer

INOSINE: 5'-O-DMT-2'-deoxyinosine-3'-CE-Phosphoramidite

Sample #: **P10984B-MOXZDMSMOXZ-2Inosine**

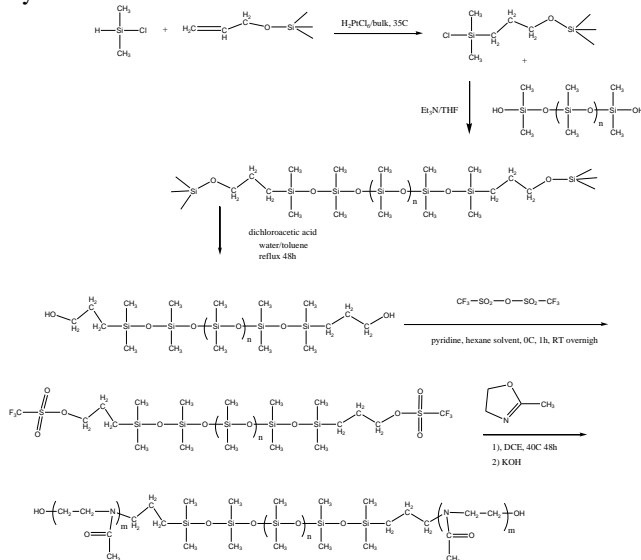
Structure:



Composition:

Mn x 10 ³ MEOXZ-DMS-MEOXZ	PDI
0.25-b-2.6-b-0.25	1.6
Dp: 4.0-b-35.0-b-4.0	
Presence of unreacted Inosine	<3%

Synthesis Procedure:



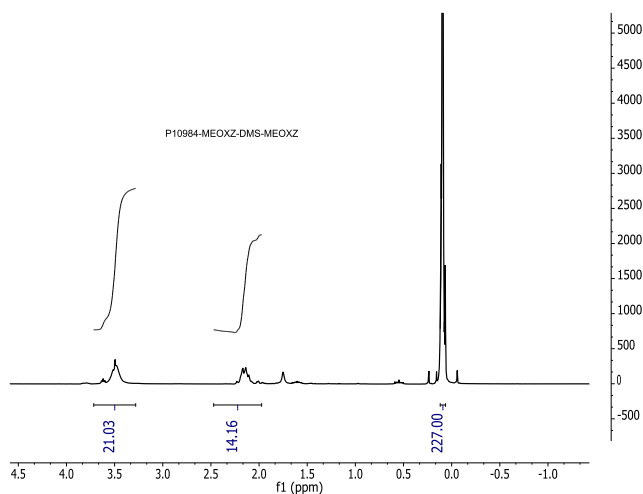
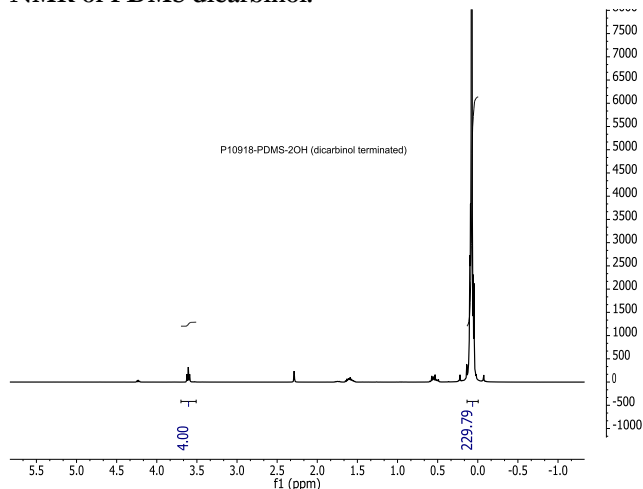
Characterization:

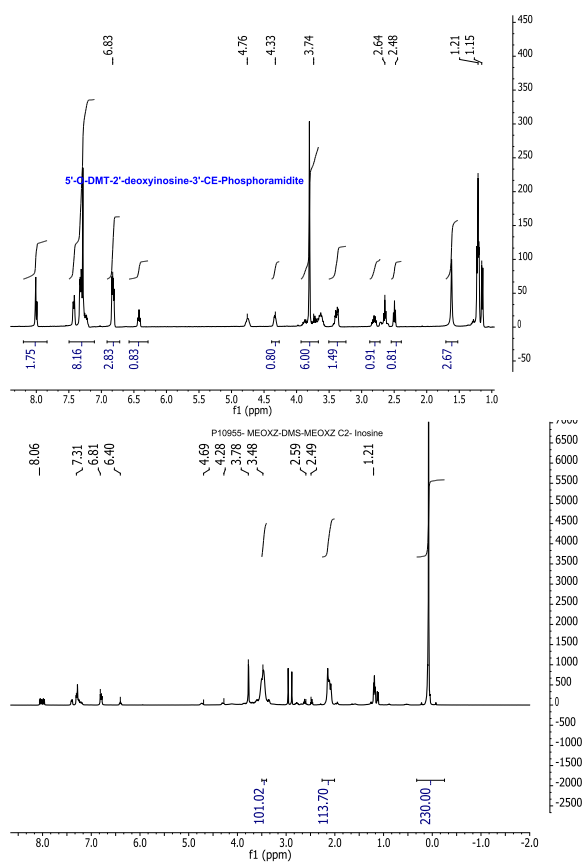
Central Block: Size exclusion chromatography (SEC): Varian liquid chromatograph equipped with UV and refractive detector. SEC columns from Supelco were used with THF and for the block copolymer in DMF as the eluent. The columns were calibrated with monodisperse poly(dimethyl siloxane). The molecular weights and the polydispersity indices were calculated.

Side Block: The chemical composition was extracted from proton NMR, which was recorded from Varian 500MHz instrument using CDCl₃ as solvent. The molecular weight of side block was calculated based on the molecular weight of central block and the chemical composition.

Proof of attachment of inosine was checked by GPC analysis of the pure inosine and after the attachment of inosine with triblock copolymer. Run in THF indicates traces amount on un-reacted inosine presence in the triblock copolymer.

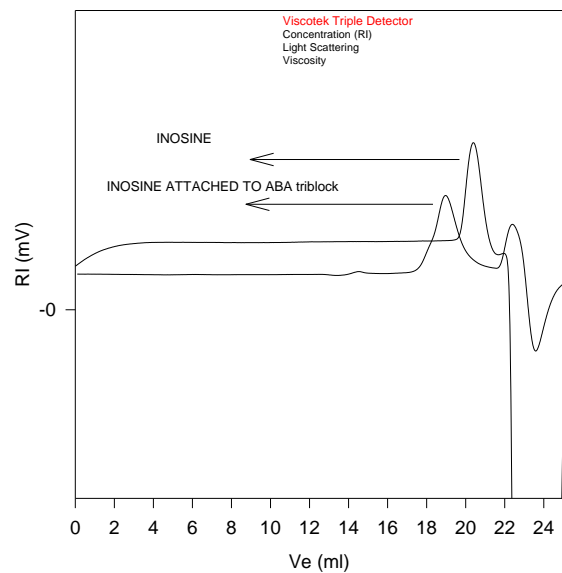
NMR of PDMS dicarbinol:





SEC Analysis in DMF:

P10984B-MeOXZDMSMeOXZ run in DMF



Size Exclusion Chromatography of polymer:

Precursor in THF at 35 oC and Triblock in DMF at 60 oC

— MEOXZ-DMS-MEOXZ $M_n = 255$ -b-2600-b-255 $M_w/M_n = 1.6$