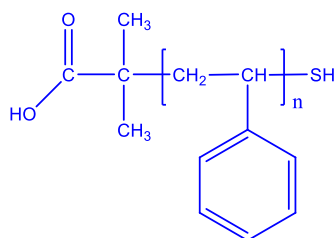


Sample Name:
Poly(styrene), (α -carboxy, ω -thiol)-terminated

Sample #: **P6696-SCOOHSH**

Structure:

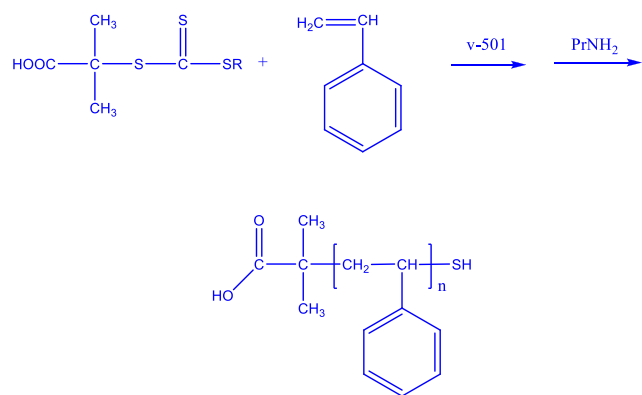


Composition:

Mn x 10 ³	PDI	Functionality%
3.0	1.20	95

Synthesis Procedure:

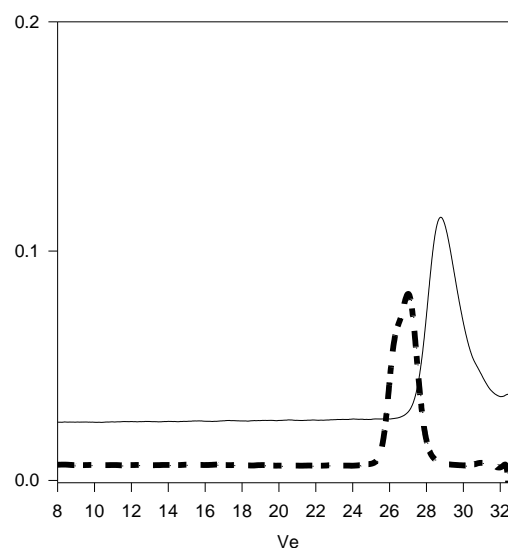
The hetero-functional terminated Polystyrene was prepared by RAFT polymerization of styrene in dioxane followed by aminolysis to liberate thiol. The scheme of the reaction is illustrated below:



Characterization:

The molecular weight and polydispersity index of this polymer were determined by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was verified by NMR.

SEC profile of the Sample:
P6696-SCOOHSH



Size Exclusion Chromatography :

— Carboxy - thiol terminated Polystyrene
 SEC profile shows elution retarded
 - - - After Protection of free COOH to methyl ester:
 Mn 3000 Mw: 3600 $M_w/M_n=1.20$

H NMR spectrum of Sample (before aminolysis):

