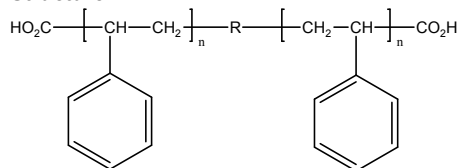
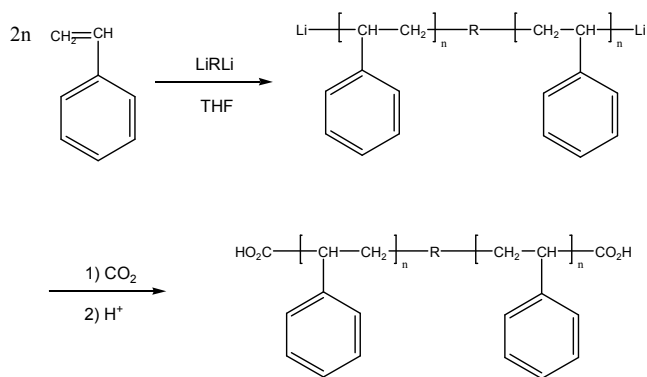


**Sample Name:** **$\alpha,\omega$ -Carboxy Terminated Polystyrene****Solubility:** Polymer is soluble in THF, Dioxane,  $\text{CHCl}_3$  and precipitated out from methanol/water, and in cold hexane.**Sample #:** P4573-S2COOH**SEC of Sample:****Structure:****Composition:**

$\text{Mn} \times 10^3$	PDI
8.0	1.09

**Synthesis Procedure:**

The functionalized polymer was prepared by anionic living polymerization of styrene using bifunctional as initiator in THF followed by terminating the polymerization reaction with dried  $\text{CO}_2$ . The scheme of the reaction is illustrated below:

**Characterization:**

The molecular weight and polydispersity index of this polymer were determined before the addition of the carboxy function by size exclusion chromatography (SEC) using a Varian liquid chromatograph equipped with a UV and refractive index detector. Polymer functionality was determined by the titration with NaOH using phenolphthalein as the indicator.