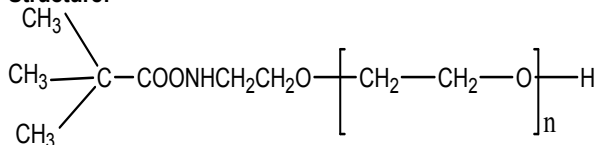


Sample Name:

N-(*tert*-Butoxycarbonyl)ethanolamine terminated
Poly ethylene glycol (Boc-2-aminoethanol
terminated Poly (ethylene glycol)

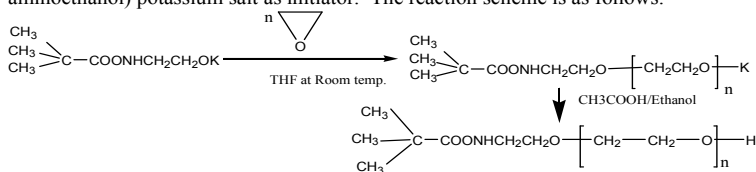
Sample #: P4867A- BOC-EG

Structure:**Composition:**

Mn x 10 ³ BOC-EG	PDI
6.0	1.08

Synthesis Procedure:

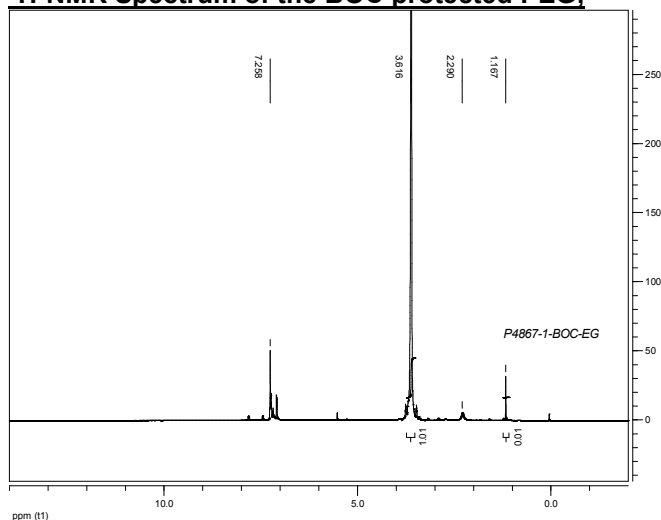
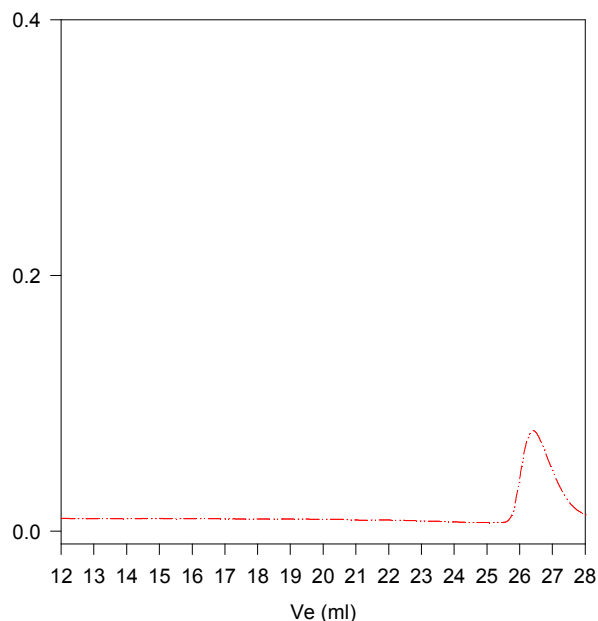
BOC- end functionalized Poly(ethylene oxide) is prepared by living anionic polymerization of ethylene oxide using and (Boc-2-aminoethanol) potassium salt as initiator. The reaction scheme is as follows:

**Characterization:**

Polymer was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). Polymer composition was calculated from ¹H-NMR spectroscopy by comparing the peak area of the ethylene oxide protons at about 3.6 ppm with the 9-protons from *tert*. Butoxy at about 1.2ppm.

Solubility:

Polymer is soluble in THF, water, methanol and precipitated out from cold hexane, ether.

¹H-NMR Spectrum of the BOC protected PEG;**P4867A-BOC-EG**

Size exclusion chromatography of poly(ethylene oxide-*b*-*t*.butyl methacrylate)

..... Poly(ethylene oxide), M_n=6000, M_w=6500, PI=1.08