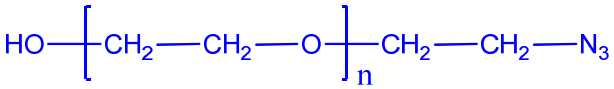
Sample Name:
α-hydroxy-ω-Azide terminated Poly(ethylene glycol)
Or azide terminated Poly ethylene glycol
Sample #: **P6779- EGOHN3**

Structure:



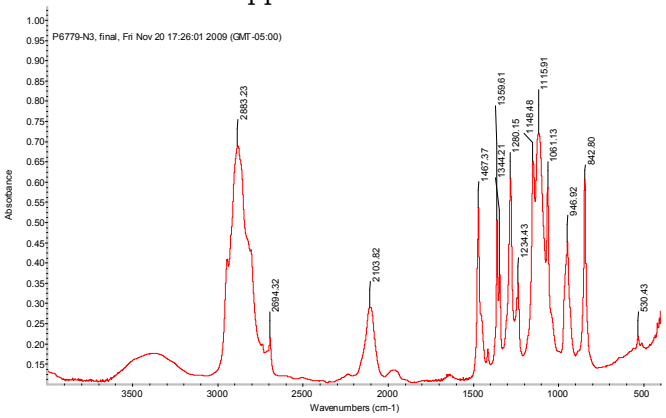
Composition:

Mn x 10^3	PDI
2.2	1.17
Azide functionality by HNMR	Over 125 % (Contg 25% of diazido-PEG)

Synthesis Procedure:
Azide end functionalized Poly(ethylene glycol) is prepared by living anionic polymerization of ethylene oxide, followed by modification of hydroxy terminal to mesylate and then to azide group.

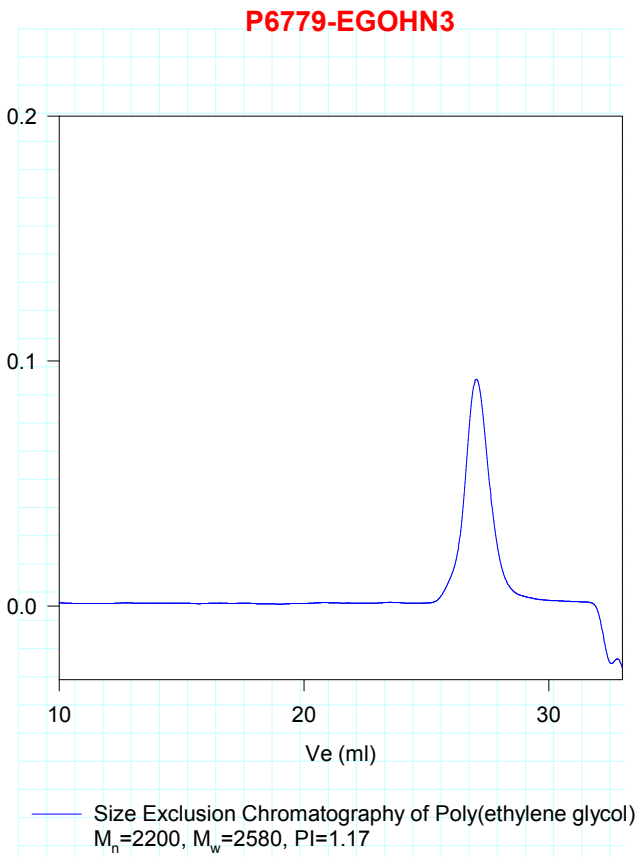
Characterization:
An aliquot of the poly(ethylene oxide) before addition of mestyl chloride was analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI). The functionality of polymer obtained at each step and the final product was calculated from ^{1}H-NMR spectroscopy.

FTIR:
N3 characteristic appears at 2101 cm^{-1}.



Solubility:
Azido end functionalized poly(ethylene oxide) is soluble in CHCl3, THF and precipitated out from hexanes.

SEC of the polymer :



NMR of α-azide-ω-hydroxy terminated PEG