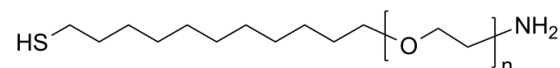


Sample Name:

**Poly(ethylene glycol), ( $\alpha$ -undecyl thiol,  $\omega$ -amino)-terminated**

Sample #: **P6563-EGNH2(CH2)11SH**

**Structure:**



**Composition:**

Mn x 10 <sup>3</sup>	PDI	SH functionality
2.4	1.10	>99%

**Synthesis Procedure:**

Hetero functional  $\alpha$ -Alkane (undecane) Thiol  $\omega$ -Amino Terminated Poly(ethylene glycol) was prepared anionic living polymerization. The procedure is proprietary and is subjected to submit the article for the publication.

**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.

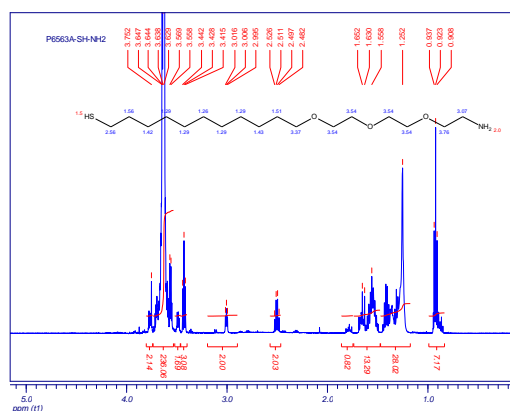
**FTIR:**

FTIR is used to monitor the reaction.

**Solubility:**

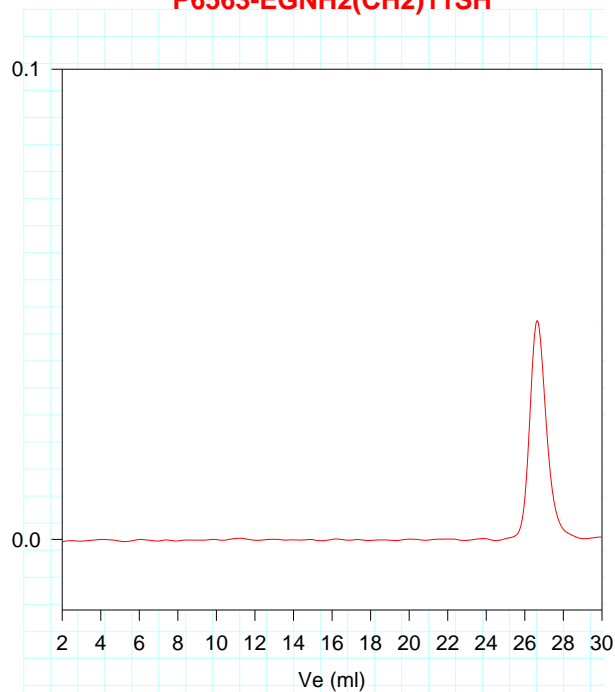
Polymer is soluble in water, methanol, ethanol, THF, and CHCl<sub>3</sub>. It is precipitated out from cold ethanol, isopropanol, hexane, and ether.

**HNMR of the Functionality > 99%**



**SEC of Sample:**

**P6563-EGNH2(CH2)11SH**



Size exclusion chromatograph of Poly(ethylene oxide):

M<sub>n</sub>=2,400, M<sub>w</sub>=2,600, PI=1.10