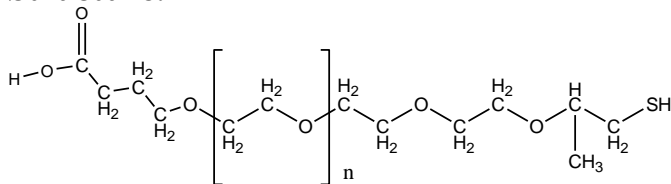


## Sample Name:

$\alpha$ -Carboxylic acid - $\omega$ -Thiol Terminated  
Poly(ethylene glycol)

Sample #: P11418-EG-COOH SH

## Structure:



## Composition:

Mn x 10 <sup>3</sup>	PDI
0.7	1.15

## Synthesis Procedure:

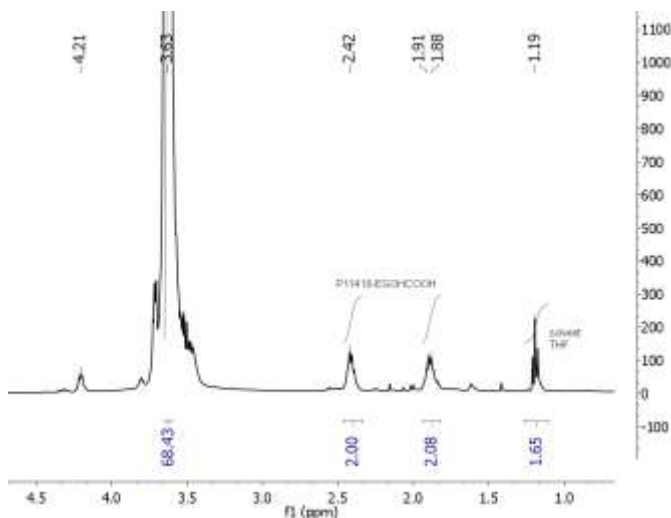
Thiol terminated Poly(ethylene glycol methyl ether) was prepared as reported in our patent:

S. K. Varshney, J.X. Zhang, US patent 7,009,033 B2, 2006. Assigned to Polymer source, Inc. Canada Heterofunctional Polyethylene glycol and Poly ethylene oxide, process for their Manufacture

## 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 oxidation of the thiol to disulfide and by titration. **Solubility:** Polymer is soluble in water, methanol and ethanol,

## 1. HNMR of $\alpha$ -Carboxylic acid - $\omega$ -OH Terminated Poly(ethylene glycol) in CdCl<sub>3</sub>



## HNMR of HNMR of $\alpha$ -Carboxylic acid - $\omega$ -OH Terminated Poly(ethylene glycol) in DMSO

In DMSO:

