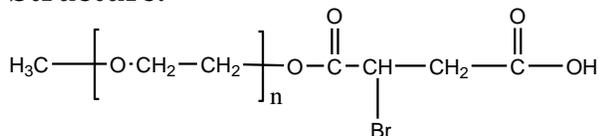


Sample Name:
 α -Bromo α' -COOH end functionalized
 Poly(ethylene glycol) methyl ether

Sample #: P8243-EGBrCOOH

Structure:

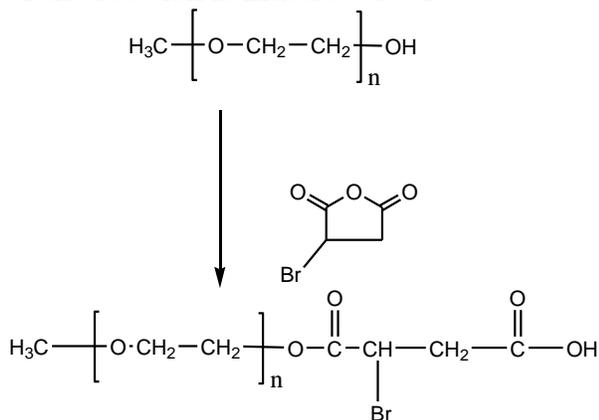


Composition:

$M_n \times 10^3$	PDI
2.0	1.10

Synthesis Procedure:

α -Bromo α' -COOH end functionalized Poly(ethylene glycol methyl ether) was prepared by reaction of OH terminated PEG with α -Bromo succinic anhydride. The scheme of the reaction is illustrated below.



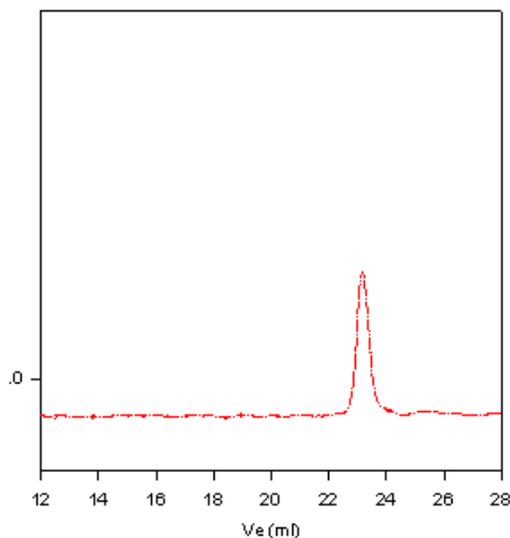
Characterization:

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 FTIR/H NMR depending on the molecular weights.

Solubility:

Polymer is soluble in water, methanol and ethanol, THF, CHCl_3 . It is precipitated out from cold ethanol, isopropanol, hexane and ether.

SEC of Sample: The starting PEG before reaction with bromosuccinic anhydride



Size exclusion chromatograph of α -OH ω Methoxy terminated poly(ethylene glycol):
 $M_n=2000$, $M_w=2200$, PI=1.10

HNMR of the Polymer:

