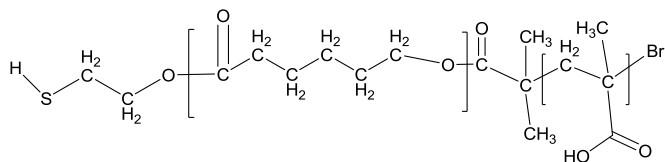


Sample Name:

Thiol end-functionalized Poly(methacrylic acid-b-ε-caprolactone)

Sample #: P20007B4A-MAACL-SH

Structure:



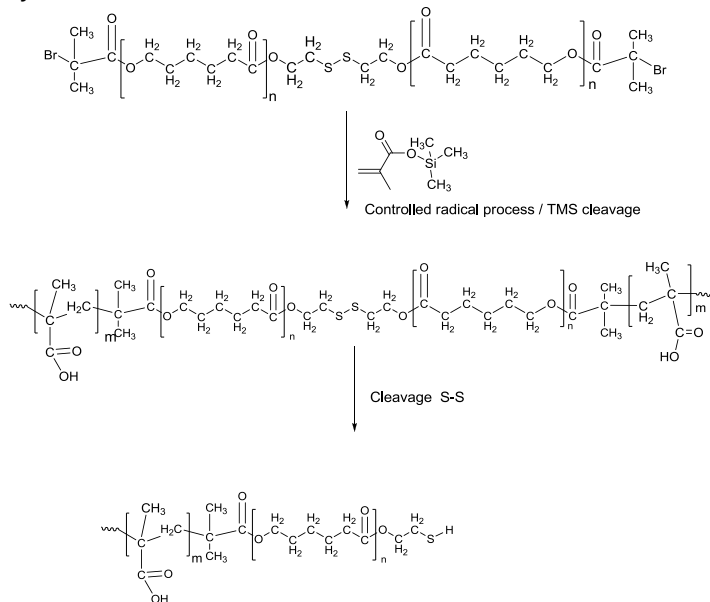
Composition:

$M_n \times 10^3$ MAA-b-CL-SH	PDI
0.7–1.6	1.2 (PCL precursor)
SH functionality >95% *	

* – SH-functionality is judged based on complete disappearance of the peak at 2.91 ppm, as the terminal groups in block copolymers might not give correct integration value due to the aggregation processes in solution.

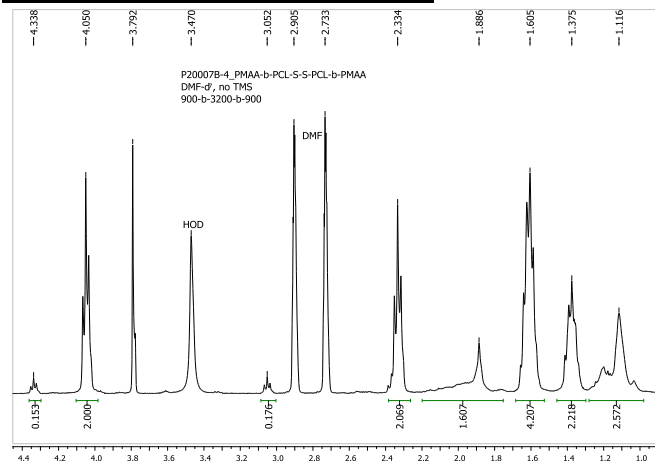
Oxidation of tBuA-CL-SH in THF by oxygen in presence of Iodine as catalyst leads to quantitative re-formation of disulfide linkage, indicating that most of the end chains possess free SH-group.

Synthesis Procedure:

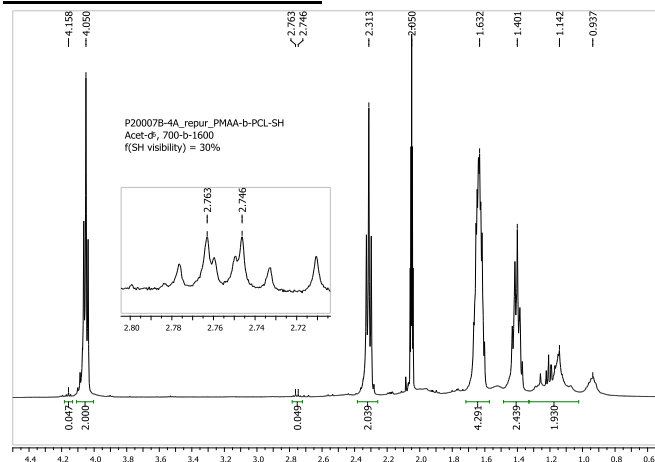


Characterization:
By SEC and HNMR:

HNMR of the MAA-CL-S-CLMAA



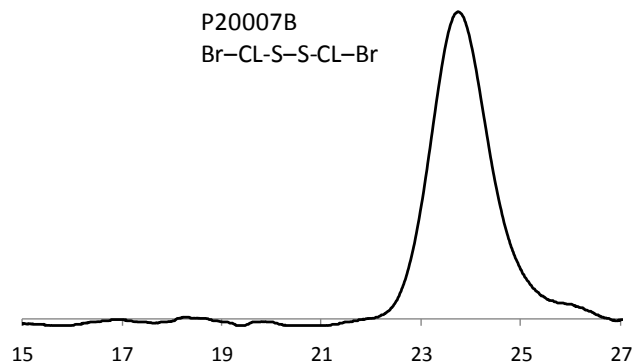
HNMR of the MAA-CL-SH



SEC of the block copolymer:

P20007B4A-MAA-CL-SH (PCL precursor)

P20007B
Br-CL-S-S-CL-Br



Size-exclusion chromatography of the product:

Due to the strong interaction of COOH-groups with the column packing material, SEC elugrams of block copolymers are unavailable