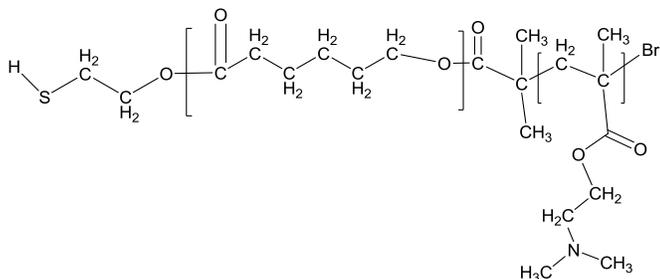


### Sample Name:

Thiol end-functionalized Poly[(2-dimethylaminoethyl methacrylate)-b-ε-caprolactone]

Sample #: P20022A2-2A-DMAEMA-CL-SH

### Structure:



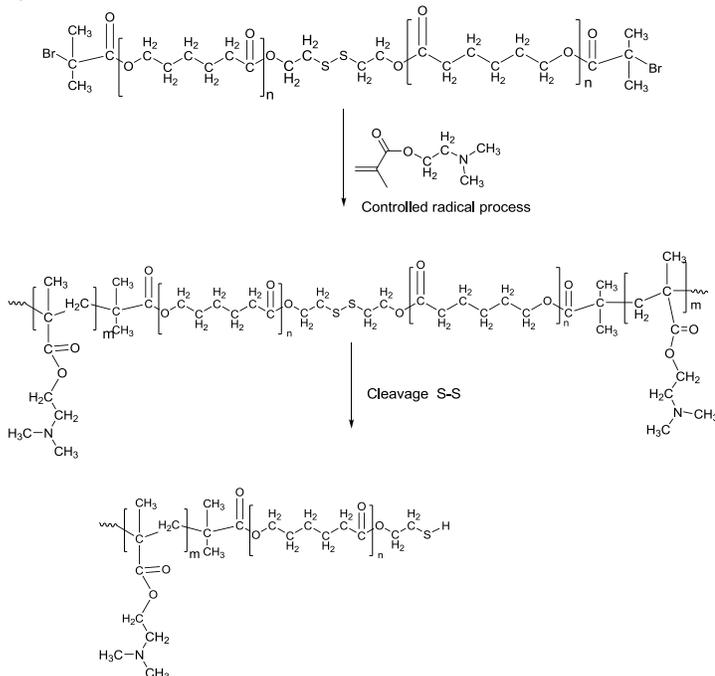
### Composition:

$M_n \times 10^3$ DMAEMA-b-CL-SH	PDI
3.1-3.4	1.4
SH functionality >95% *	

\* - SH-functionality is judged based on 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.

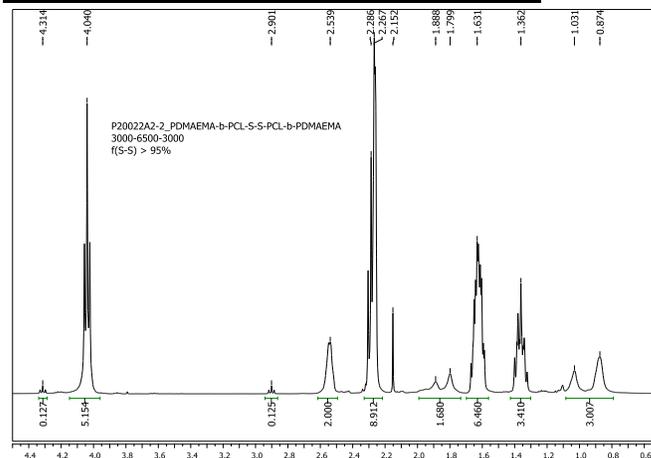
Oxidation of St-CL-SH in THF by oxygen in presence of Iodine as catalyst leads to quantitative re-formation of disulfide linkage, indicating that most of the end chains possess free SH-group.

### Synthesis Procedure:

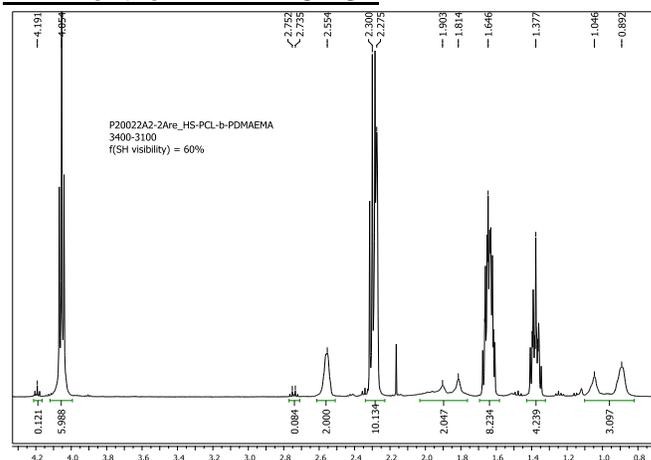


Characterization:  
By SEC and HNMR:

### HNMR of the DMAEMA-CL-S-S-CL-DMAEMA

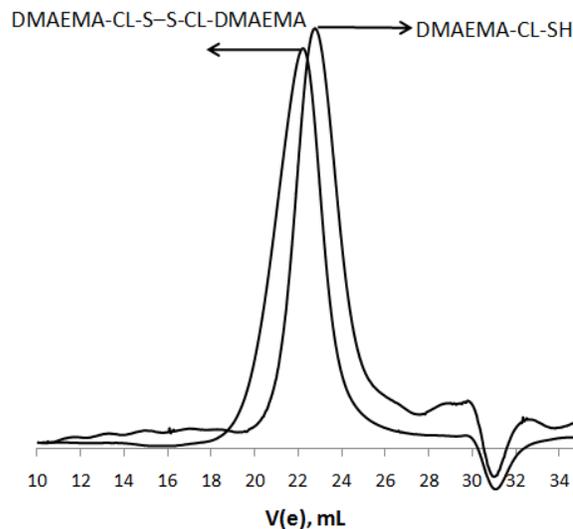


### HNMR of the DMAEMA-CL-SH



### SEC of the block copolymer:

#### P20022A2-2A-DMAEMA-CL-SH



Size-exclusion chromatography of the product:

Before cleavage:  $M_w / M_n = 1.3$   
After cleavage:  $M_w / M_n = n/a$