## **Sample Name:**

# Thiol end-functionalized Poly(t-butyl acrylate-b-\varepsilon-caprolactone)

## Sample #: P20007B1A-tBuACL-SH

#### **Structure:**

#### Composition:

$M_n \times 10^3$ tBuA-b-CL-SH	PDI
2.0–1.6	1.2
SH functionality >95% *	

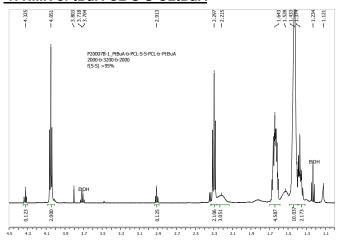
\* – SH–functionality is judged based on complete disappearance of the peak at 2.91 ppm, as the terminal groups in block copolymers might not give correct integration value due to the aggregation processes in solution.

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.

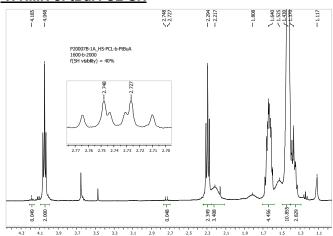
### Synthesis:

## Characterization:

## <sup>1</sup>H NMR of tBuA-CL-S-S-CLtBuA

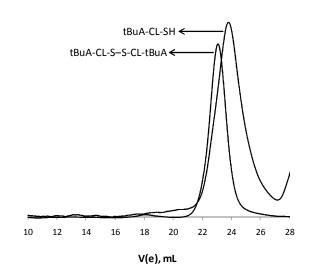


# <sup>1</sup>H NMR of tBuA-CL-SH



## SEC of the block copolymer:

## P20007B1A-tBuA-CL-SH



Size—exclusion chromatography of the product: Before cleavage,  $M_{\rm w}$  /  $M_{\rm n}$  = 1.2 After cleavage,  $M_{\rm w}$  /  $M_{\rm n}$  = n/a