Electronic Supplementary Material (ESI) for Polymer Chemistry.

Supporting Information

Acrylamides with hydrolytically labile carbonate ester side chains as versatile building blocks for well-defined block copolymer micelles via RAFT polymerization

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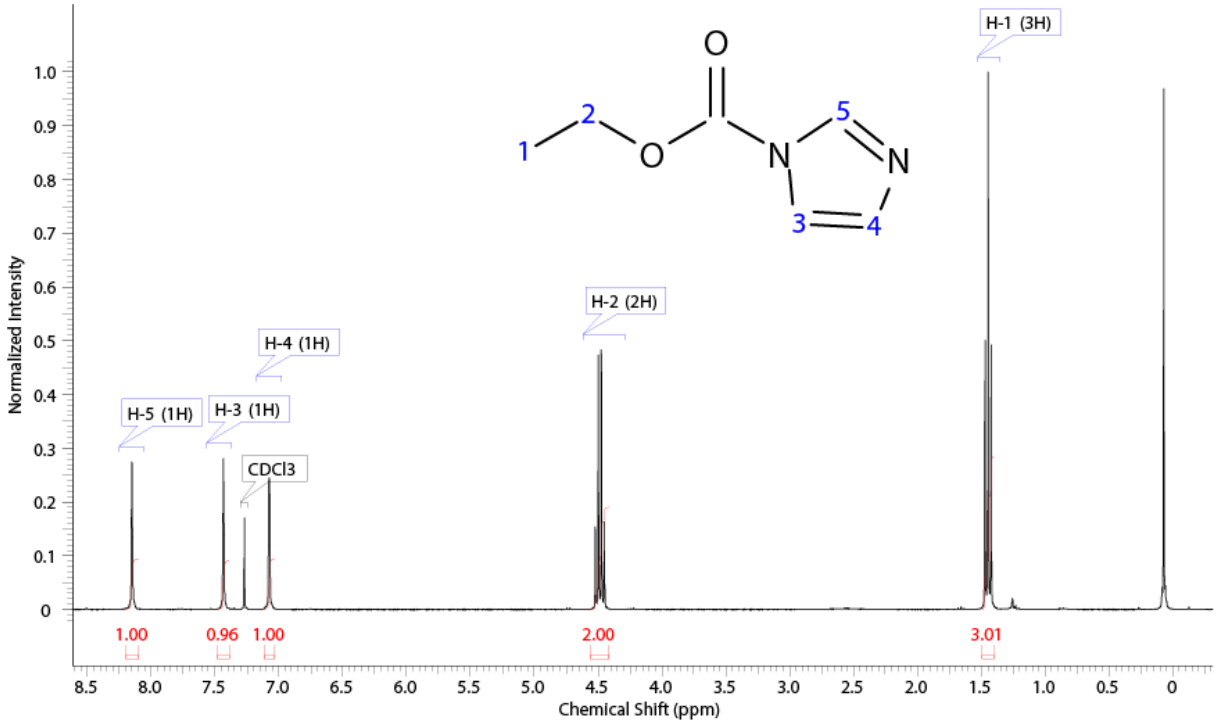

Figure S1. ^{1}H-NMR of Cl-activated ethanol.

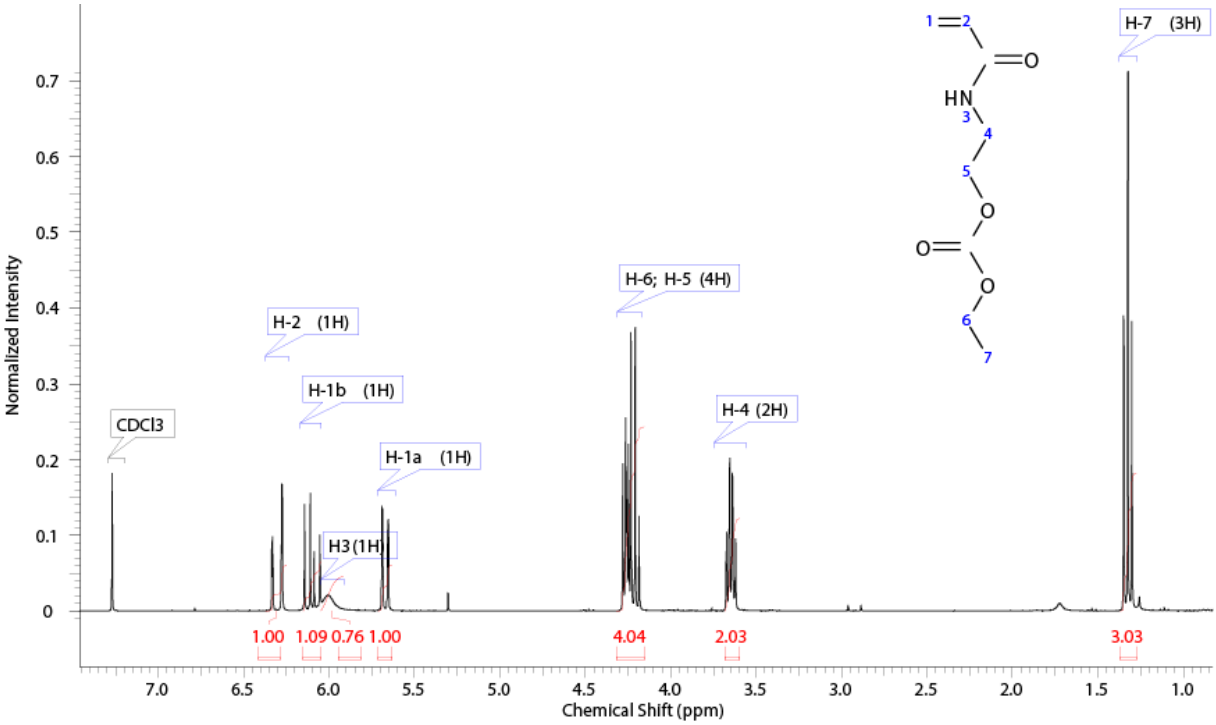

Figure S2. ^{1}H-NMR of HEAm-EC.

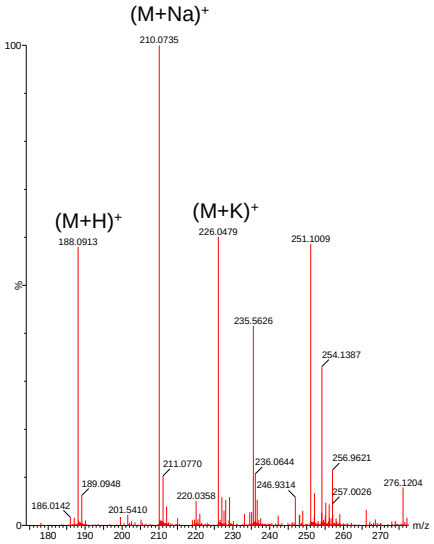

Figure S3. ESI-MS of HEAm-EC.

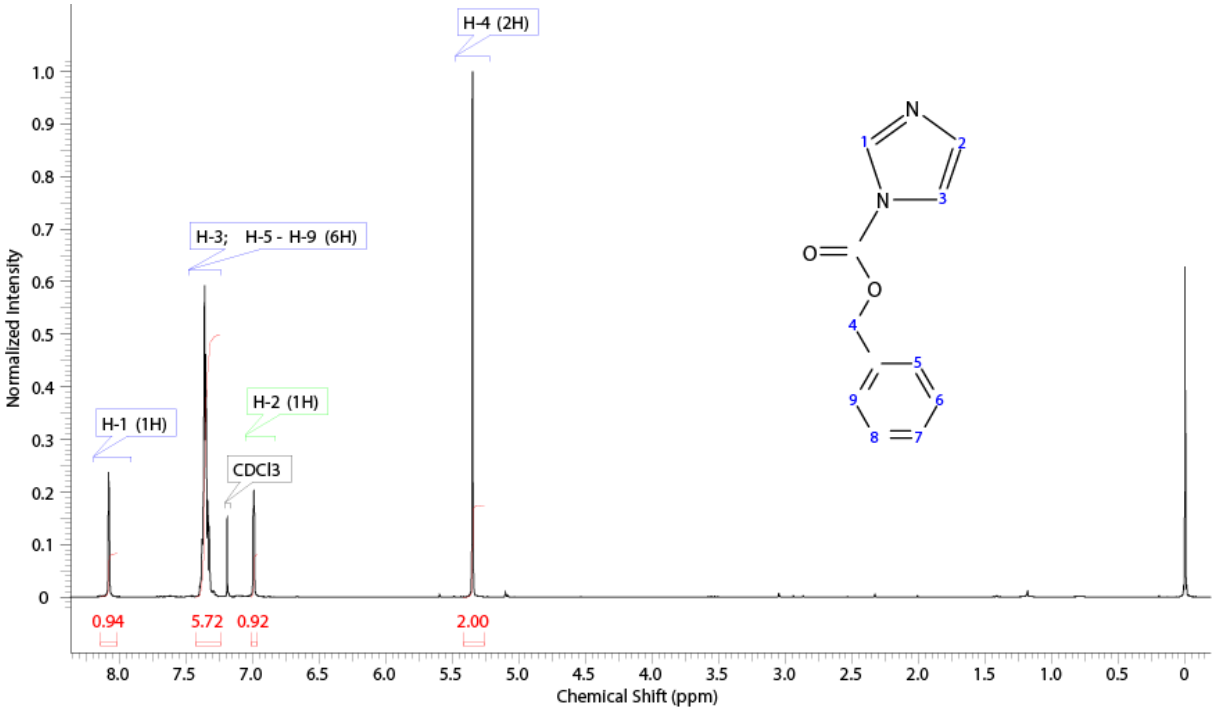

Figure S4. ^{1}H-NMR of Cl-activated benzylalcohol.

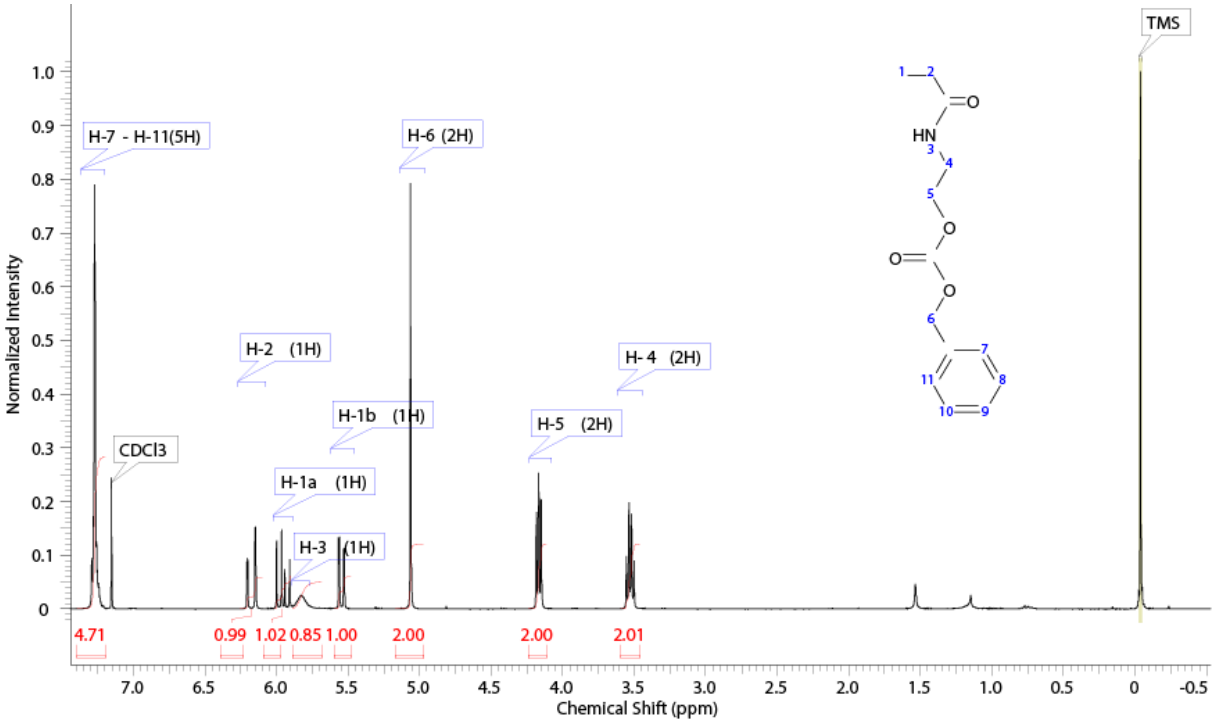

Figure S5. ^{1}H-NMR of HEAm-BC.

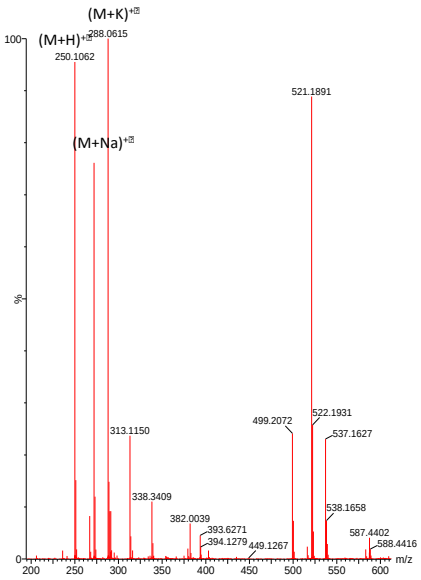

Figure S6. ESI-MS of HEAm-BC.

Table S1. Supramolecular characteristics of synthesized block copolymers.

Polymer	Volume mean (nm)[a]	Đ[a]
$pHEAm_{64}$-$pHEAmEC_{26}$	10.99	0.36
$pHEAm_{64}$-$pHEAmEC_{56}$	32.12	0.16
$pHEAm_{140}$-$pHEAmEC_{88}$	44.63	0.036
$pHEAm_{140}$-$pHEAmEC_{160}$	86.47	0.13
PEG-$pHEAmEC_{41}$	29.33	0/12
PEG-$pHEAmEC_{81}$	46.33	0.10
$pHEAm_{64}$-$pHEAmBC_{25}$	27.40	0.26
$pHEAm_{64}$-$pHEAmBC_{68}$	65.22	0.32
$pHEAm_{140}$-$pHEAmBC_{91}$	94.69	0.40
$pHEAm_{140}$-$pHEAmBC_{172}$	91.54	0.27
PEG-$pHEAmBC_{42}$	35.56	0/081
PEG-$pHEAmBC_{78}$	101.23	0.050

[a] Numeric values of volume mean and Đ, measured by DLS at 25°C (n=3)

Table S2. Overview of CMC values and polymer concentrations in the samples used for the MTT assay.

PTX-concentration	$pHEAM_{64}$-$pHEAMEC_{26}$	$pHEAM_{64}$-$pHEAMBC_{25}$	$pHEAM_{64}$-$pHEAMEC_{56}$	$pHEAM_{64}$-$pHEAMBC_{68}$	PEG-$pHEAMEC_{41}$	PEG-$pHEAMBC_{42}$	PEG-$pHEAMEC_{81}$	PEG-$pHEAMBC_{78}$
(μM)	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL
CMC (mg/mL)	0.081 ± 0.03	0.024 ± 0.002	0.031 ± 0.002	0.0047 ± 0.0004	0.023 ± 0.004	0.0036 ± 0.0006	0.0096 ± 0.003	0.0033 ± 0.0003
2	1.71	0.688	0.516	0.152	0.208	0.0368	0.042	0.032
1	0.855	0.344	0.258	0.076	0.104	0.0184	0.021	0.016
0.1	0.085	0.034	0.0258	0.0076	0.0104	0.00184	0.0021	0.0016
0.01	0.0085	0.0034	0.00258	0.00076	0.00104	0.000184	0.00021	0.00016
0.001	0.00085	0.00034	0.000258	0.000076	0.000104	0.0000184	0.000021	0.000016
0.0001	0.000085	0.000034	0.0000258	0.0000076	0.0000104	0.00000184	0.0000021	0.0000016
0.00001	0.0000085	0.0000034	0.00000256	0.0000076	0.00000104	0.000000184	0.00000021	0.00000016

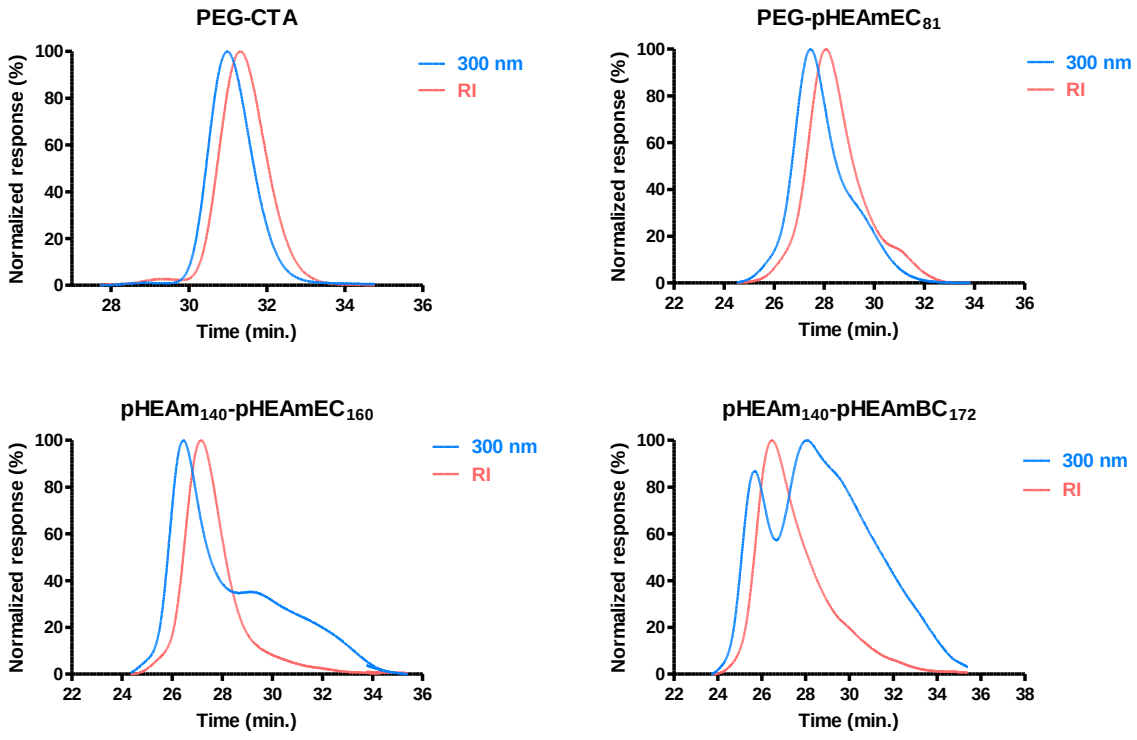

Figure 7. DAD-SEC traces of polymers before and after chain extension of the $_{p}HEAm_{x}$- en PEG-macroCTA with HEAm-EC/HEAm-BC.