

Supporting Information For
“*t*BCPMA: A New Trifunctional Acrylic Monomer
for Convenient Synthesis of Well-Defined
Amphiphilic Graft Copolymer by Successive RDRP”

Chun Feng,¹ Guolin Lu,¹ Gang Sun,^{2,} Xunwei Liu,² Xiaoyu Huang^{1,*}*

¹ Laboratory of Synthetic and Self-Assembly Chemistry for Organic Functional Molecules, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 345 Lingling Road, Shanghai 200032, P. R. China

² Department of Medical Imaging, Jinan Military General Hospital, 25 Shifan Road, Jinan 250031, P. R. China

* To whom correspondence should be addressed, E-mail: xyhuang@mail.sioc.ac.cn

(Tel: +86-21-54925310, Fax: +86-21-64166128), cjr.sungang@vip.163.com (Tel:

+86-531-51666277,

Fax:

+86-531-51666277)

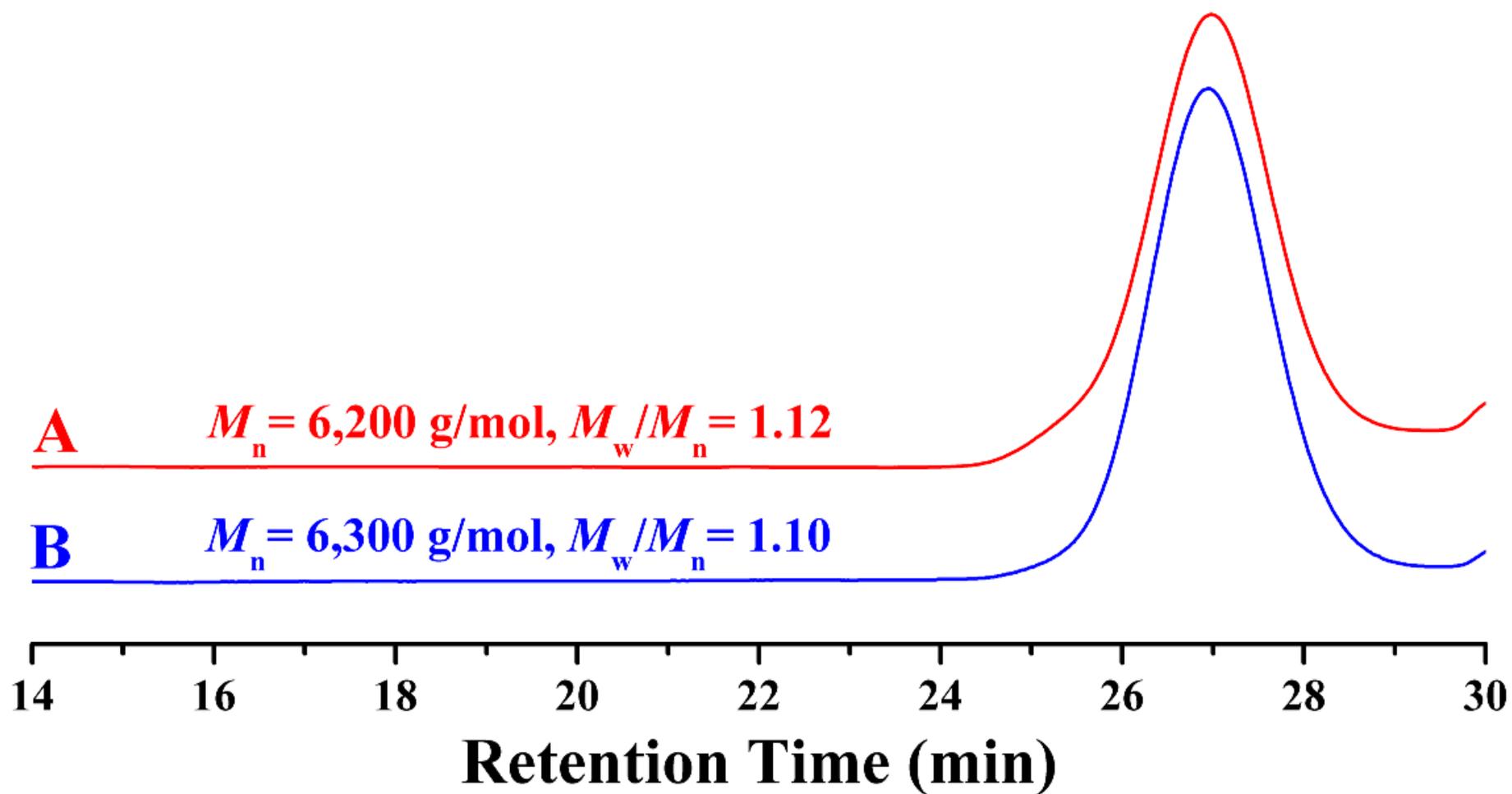


Figure S1. GPC curves of PtBCPMA 2 homopolymer before (A) and after (B) the removal of dithiobenzoate moiety in THF.

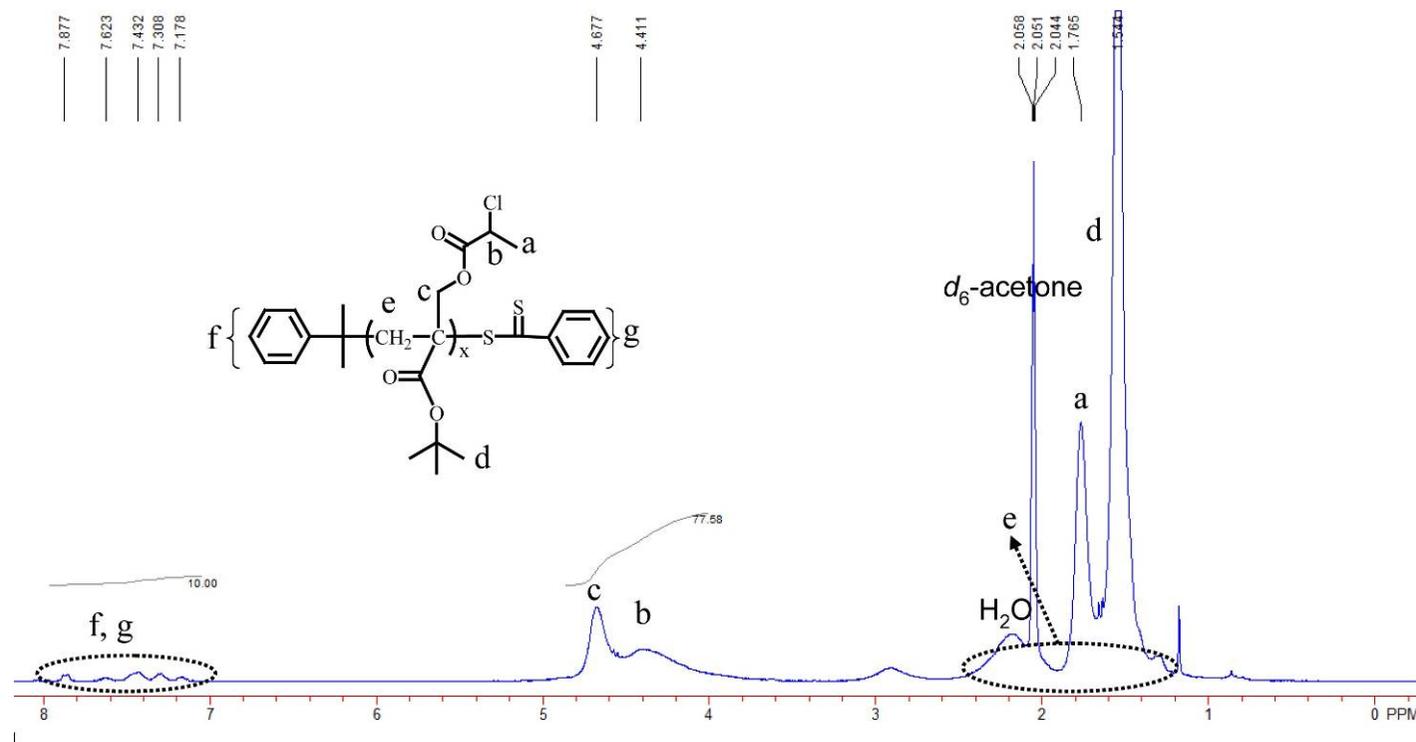


Figure S2. ^1H NMR spectrum of PtBCPMA **2** homopolymer before the removal of dithiobenzoate moiety in acetone- d_6 .

Note: ^1H NMR was employed to estimate the molecular weight of the obtained homopolymer as shown in Figure S2. The number of repeated unit of *t*BCPMA could be evaluated from the ratio of integral area of peaks of “f” and “g” to peaks of “b” and “c”. The number of repeated unit of *t*BCPMA evaluated from ^1H NMR was 25.8 ($= [S_{(b+c)}/3]/[S_{(f+g)}/10]$, $S_{(b+c)}$ and $S_{(f+g)}$ are the integral area of peaks of “b” and “c”, and peaks of “f” and “g”, respectively).

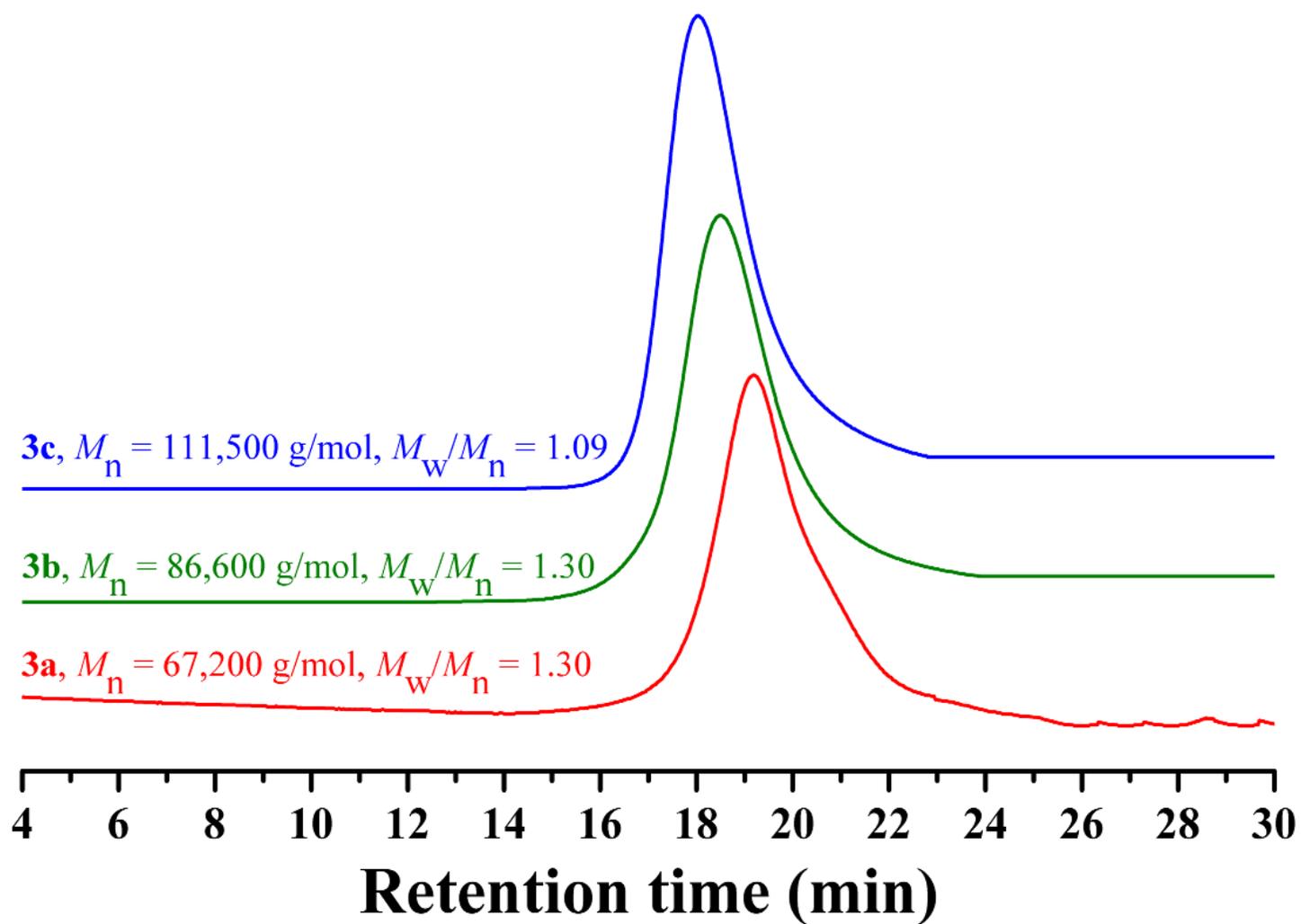


Figure S3. GPC/MALS curves of PtBA-g-PNIPAM **3** graft copolymers in LiBr-added DMF ([LiBr] = 15 mM).

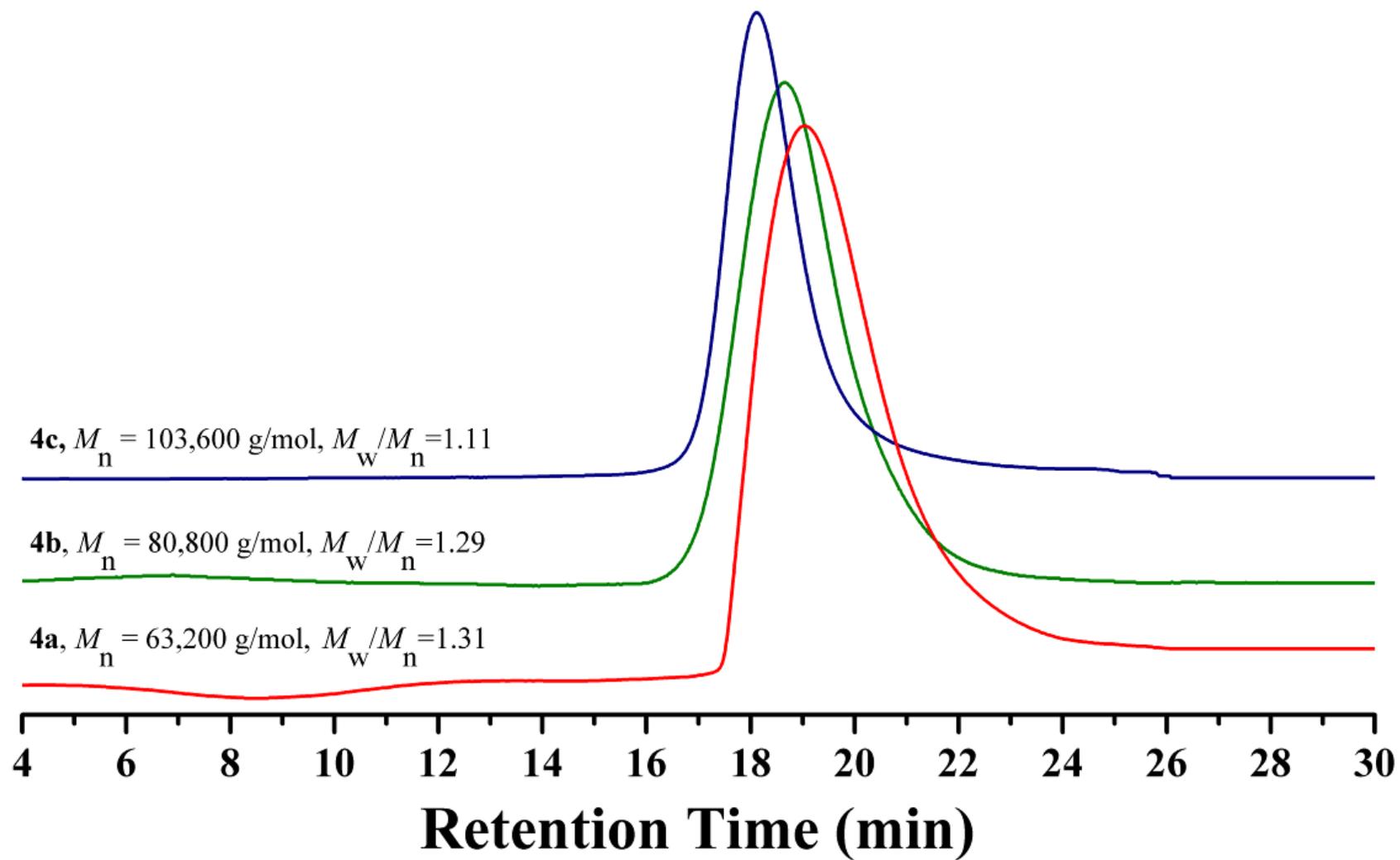


Figure S4. GPC curves of PAA-g-PNIPAM 4 graft copolymers in LiBr-added DMF ($[\text{LiBr}] = 15$ mM).

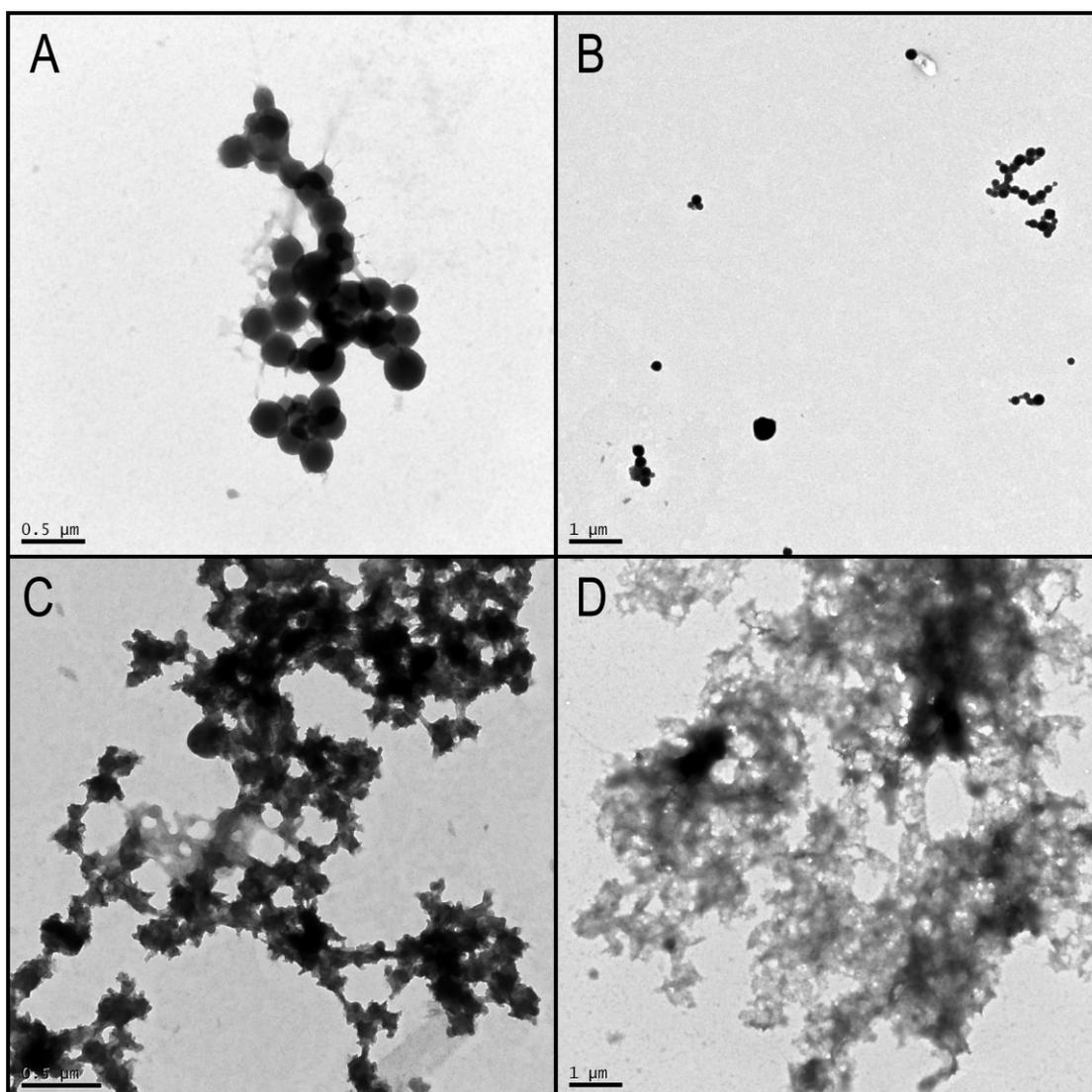


Figure S5. TEM images of PtBA-g-PNIPAM **3b** (A) and **3c** (B) at 25°C (below LCST of PNIPAM); PtBA-g-PNIPAM **3a** (C) and PAA-g-PNIPAM **4a** (D) at 36°C (above LCST of PNIPAM).