

Table S1. Block copolymers used in the HT library nanoparticle formation and in preliminary screening. The block copolymers are ordered by the outer block type, and then by increasing molecular weight. For preliminary studies to examine the effect of block length on nanoparticle formation, a series of block copolymers that systematically varied in weight % of OEO MA and GMA blocks were cross-linked with different amines and characterized.

		M_n (g/mol)	PDI	Weight % shell forming block	Weight % core forming block (GMA)
A	P((OEO ₅ MA) ₄₇ -b-GMA ₆)	15,200	1.31	95	5
B	P((OEO ₅ MA) ₅₆ -b-GMA ₈)	18,300	1.37	94	6
C	P((OEO ₅ MA) ₁₂ -b-GMA ₁₃₅)	23,050	1.35	16	84
D	P((OEO ₅ MA) ₅₆ -b-GMA ₉₃)	30,400	1.98	56	44
E	P((OEO ₅ MA) ₅₀ -b-GMA ₁₇₈)	40,530	1.49	37	63
F	P((OEO ₅ MA) ₁₀₆ -b-GMA ₄₇₈)	100,200	2.56	32	68
G	P((OEO ₅ MA) ₉₀ -b-(HEMA ₂₃ -r-GMA ₁₇))	34,300	1.68	83	17
H	P((OEO ₉ MA) ₄₈ -b-GMA ₁₇)	25,300	1.24	90	10
I	P((OEO ₂₃ MA) ₉ -b-GMA ₃)	10,040	1.20	96	4
J	P((OEO ₂₃ MA) ₁₈ -b-GMA ₁₆₈)	34,300	1.56	45	55
K	P(CEA ₁₀₄ -b-GMA ₁₂₆)	34,200	1.48	46	54
L	P(MAA ₂₃₂ -b-GMA ₆₃₉)	110,800	1.95	18	82
M	P(DMAEMA ₄₃ -b-GMA ₂₃)	13,550	1.35	67	33
N	P(Zwit ₅₇ -b-GMA ₃₇₁)	69,400	1.6	24	76
O	P(MMA ₁₄₆ -b-GMA ₂₅)	18,200	1.12	80	20
P	PGMA ₂₂	3,120	1.27	0	100
Q	P((OEO ₅ MA) ₂₅ -b-GMA ₃)	8,810	1.37	95	5
R	P((OEO ₅ MA) ₂₅ -b-GMA ₆)	9,130	1.36	90	10
S	P((OEO ₅ MA) ₂₅ -b-GMA ₁₀)	9,770	1.37	84	16
T	P((OEO ₅ MA) ₂₅ -b-GMA ₁₈)	10,840	1.33	75	25
U	P((OEO ₅ MA) ₂₅ -b-GMA ₃₁)	12,680	1.70	63	37
V	P((OEO ₅ MA) ₃₂ -b-GMA ₁₃)	11,810	1.38	84	16
W	P((OEO ₅ MA) ₃₂ -b-GMA ₁₆₁)	33,120	1.35	30	70
X	P((OEO ₅ MA) ₄₄ -b-GMA ₂₁)	17,000	1.36	82	18
Y	P((OEO ₅ MA) ₄₄ -b-GMA ₈₇)	26,410	1.40	52	48
Z	P((OEO ₅ MA) ₉₁ -b-GMA ₄)	28,230	1.42	98	2
AA	P((OEO ₅ MA) ₉₁ -b-GMA ₁₁₄)	43,930	1.98	63	37
BB	P(GMA ₃₉ -b-(OEO ₅ MA) ₆)	8,060	1.31	24	76
CC	P(GMA ₃₉ -b-(OEO ₅ MA) ₁₅)	10,900	1.37	45	55
DD	P(GMA ₃₉ -b-(OEO ₅ MA) ₂₂)	12,760	1.27	54	46
EE	P(GMA ₃₉ -b-(OEO ₅ MA) ₃₅)	16,640	1.25	65	35
FF	P(GMA ₃₉ -b-(OEO ₅ MA) ₄₁)	18,390	1.29	69	31
GG	P(GMA ₃₉ -b-(OEO ₅ MA) ₅₀)	21,290	1.27	73	27
HH	P(GMA ₃₉ -b-(OEO ₅ MA) ₂₄₃)	79,200	1.15	93	7
II	P(GMA ₃₉ -b-(OEO ₅ MA) ₂₆₅)	85,900	1.44	94	6