

Supporting Information for: High-throughput analysis of the structural evolution of the monoolein cubic phase *in situ* under crystallogenes conditions.

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	Top		Bottom	
	Phase	LP (Å)	Phase	LP (Å)
A1	Q _{II} ^D	91.1	Q _{II} ^D	91.2
A2	Q _{II} ^D	92.4	Q _{II} ^D	91.0
A3	Q _{II} ^D	90.9	Q _{II} ^D	91.6
A4	Q _{II} ^D	91.6	Q _{II} ^D	91.4
A5	Q _{II} ^D	91.1	Q _{II} ^D	90.2
A6	Q _{II} ^D	92.3	Q _{II} ^D	90.4
A7	Q _{II} ^G	133.2	Q _{II} ^G	132.1
A8	Q _{II} ^G	131.7	Q _{II} ^G	131.9
A9	Q _{II} ^G	132.5	Q _{II} ^G	132.3
A10	Q _{II} ^G	132.6	Q _{II} ^G	130.6
A11	Q _{II} ^G	135.6	No D	
A12	Q _{II} ^G	140.3	No D	
B1	Q _{II} ^D	90.7	Q _{II} ^D	90.7
B2	Q _{II} ^D	91.7	Q _{II} ^D	91.6
B3	Q _{II} ^D	91.9	Q _{II} ^D	91.8
B4	Q _{II} ^D	92.6	Q _{II} ^D	90.7
B5	Q _{II} ^D	91.4	Q _{II} ^D	88.7
B6	Q _{II} ^G	122.5	Q _{II} ^G	122.7
B7	Q _{II} ^G	137.0	Q _{II} ^G	134.8
B8	Q _{II} ^G	131.8	Q _{II} ^G	131.8
B9	Q _{II} ^G	132.8	Q _{II} ^G	132.5
B10	Q _{II} ^G	132.1	Q _{II} ^G	132.0
B11	Q _{II} ^G	132.5	Q _{II} ^G	131.6
B12	Q _{II} ^G	132.4	Q _{II} ^G	132.2
C1	Q _{II} ^D	93.2	Q _{II} ^D	89.5
C2	Q _{II} ^D	93.2	Q _{II} ^D	90.1
C3	Q _{II} ^D	91.1	Q _{II} ^D	91.0
C4	Q _{II} ^D	93.7	Q _{II} ^D	92.1
C5	Q _{II} ^D	91.4	Q _{II} ^D	91.2
C6	Q _{II} ^D	90.4	Q _{II} ^D	89.5
C7	Q _{II} ^G	132.2	Q _{II} ^G	132.5
C8	Q _{II} ^G	132.9	Q _{II} ^G	132.8
C9	Q _{II} ^G	140.0	Q _{II} ^G	132.2
C10	Q _{II} ^G	131.7	Q _{II} ^G	132.1
C11	Q _{II} ^G	131.8	Q _{II} ^G	132.1

C12	$Q_{ }^G$	139.4	$Q_{ }^G$	130.4
D1	$Q_{ }^D$	93.3	$Q_{ }^D$	89.3
D2	$Q_{ }^D$	93.0	$Q_{ }^D$	93.2
D3	$Q_{ }^D$	91.8	$Q_{ }^D$	90.4
D4	$Q_{ }^D$	93.5	$Q_{ }^D$	91.3
D5	$Q_{ }^D$	90.4	$Q_{ }^D$	91.0
D6	$Q_{ }^D$	88.3	$Q_{ }^D$	86.6
D7	$Q_{ }^G$	131.0	$Q_{ }^G$	131.0
D8	$Q_{ }^G$	130.3	$Q_{ }^G$	130.0
D9	$Q_{ }^G$	130.6	$Q_{ }^G$	130.4
D10	$Q_{ }^G$	132.9	$Q_{ }^G$	132.1
D11	$Q_{ }^G$	132.0	$Q_{ }^G$	131.7
D12	$Q_{ }^G$	142.2	$Q_{ }^G$	130.8
E1	$Q_{ }^G$	138.0	$Q_{ }^G$	137.7
E2	$Q_{ }^G$	135.9	$Q_{ }^G$	135.5
E3	$Q_{ }^G$	137.7	$Q_{ }^G$	137.4
E4	$Q_{ }^G$	147.4	$Q_{ }^G$	145.8
E5	$Q_{ }^G$	132.8	$Q_{ }^G$	132.8
E6	$Q_{ }^G$	135.0	$Q_{ }^G$	135.4
E7	$Q_{ }^G$	136.6	$Q_{ }^G$	135.3
E8	$Q_{ }^G$	139.8	$Q_{ }^G$	139.1
E9	$Q_{ }^G$	137.7	$Q_{ }^G$	139.1
E10	$Q_{ }^G$	139.7	$Q_{ }^G$	139.1
E11	$Q_{ }^G$	142.1	$Q_{ }^G$	141.1
E12	$Q_{ }^G$	141.1	$Q_{ }^G$	137.7
F1	$Q_{ }^G$	136.3	$Q_{ }^G$	136.3
F2	$Q_{ }^G$	132.4	$Q_{ }^G$	133.1
F3	$Q_{ }^G$	136.1	$Q_{ }^G$	135.8
F4	$Q_{ }^G$	143.7	$Q_{ }^G$	138.7
F5	$Q_{ }^G$	134.8	$Q_{ }^G$	134.5
F6	$Q_{ }^G$	135.6	$Q_{ }^G$	135.2
F7	$Q_{ }^G$	138.4	$Q_{ }^G$	138.2
F8	$Q_{ }^G$	140.6	$Q_{ }^G$	140.4
F9	$Q_{ }^G$	139.5	$Q_{ }^G$	138.4
F10	$Q_{ }^G$	141.1	$Q_{ }^G$	140.3
F11	$Q_{ }^D$	88.4	$Q_{ }^D$	87.6
F12	$Q_{ }^G$	138.1	$Q_{ }^G$	138.7
G1	$Q_{ }^G$	134.6	$Q_{ }^G$	136.3
G2	$Q_{ }^G$	136.1	$Q_{ }^G$	135.2
G3	$Q_{ }^G$	136.5	$Q_{ }^G$	136.5
G4	$Q_{ }^G$	140.3	$Q_{ }^G$	139.8
G5	$Q_{ }^G$	132.3	$Q_{ }^G$	131.5
G6	$Q_{ }^G$	133.7	$Q_{ }^G$	134.3
G7	$Q_{ }^G$	139.4	$Q_{ }^G$	135.7
G8	$Q_{ }^G$	140.9	$Q_{ }^G$	140.9
G9	$Q_{ }^G$	138.1	$Q_{ }^G$	136.7
G10	$Q_{ }^G$	138.7	$Q_{ }^D$	88.5
G11	$Q_{ }^D$	86.5	$Q_{ }^D$	87.6

G12	$Q_{ }^G$	140.2	$Q_{ }^G$	137.5
H1	$Q_{ }^G$	130.9	$Q_{ }^G$	130.2
H2	$Q_{ }^G$	127.8	$Q_{ }^G$	128.2
H3	$Q_{ }^G$	130.7	$Q_{ }^G$	130.6
H4	$Q_{ }^G$	132.9	$Q_{ }^G$	133.8
H5	$Q_{ }^G$	127.7	$Q_{ }^G$	127.9
H6	$Q_{ }^G$	129.0	$Q_{ }^G$	128.7
H7	$Q_{ }^G$	128.4	$Q_{ }^G$	128.7
H8	$Q_{ }^G$	133.9	$Q_{ }^G$	134.8
H9	$Q_{ }^G$	130.4	$Q_{ }^G$	129.5
H10	$Q_{ }^G$	142.9	$Q_{ }^G$	141.8
H11	$Q_{ }^D$	83.3	$Q_{ }^D$	82.5
H12	$Q_{ }^G$	106.2	$Q_{ }^G$	105.6

Table S1. The phase adopted and associated lattice parameter adopted in the top and bottom sub-wells for each individual well in the 96-well plate 1 day after addition of PACT screen to monoolein. Errors, not listed, were generally $< 0.5 \text{ \AA}$. *No D indicated that no diffraction was observed. No screen was added to well H12.

Top			Bottom	
	Phase	LP ($\text{\AA}$)	Phase	LP ($\text{\AA}$)
A1	$Q_{ }^D$	94.3	$Q_{ }^D$	90.9
A2	$Q_{ }^D$	93.6	$Q_{ }^D$	89.6
A3	$Q_{ }^D$	93.0	$Q_{ }^D$	90.9
A4	$Q_{ }^D$	91.3	$Q_{ }^D$	89.9
A5	$Q_{ }^D$	90.4	$Q_{ }^D$	88.8
A6	$Q_{ }^D$	91.1	$Q_{ }^D$	90.6
A7	$Q_{ }^G$	138.2	$Q_{ }^G$	135.2
A8	$Q_{ }^G$	141.0	$Q_{ }^G$	141.3
A9	$Q_{ }^G$	139.1	$Q_{ }^G$	140.6
A10	$Q_{ }^G$	137.2	$Q_{ }^G$	134.1
A11	$Q_{ }^G$	132.9	$Q_{ }^G$	132.4
A12	$Q_{ }^G$	145.9	$Q_{ }^G$	134.6
B1	$Q_{ }^D$	90.2	$Q_{ }^D$	89.7
B2	$Q_{ }^D$	94.4	$Q_{ }^D$	94.2
B3	$Q_{ }^D$	93.6	$Q_{ }^D$	91.1
B4	$Q_{ }^D$	92.6	$Q_{ }^D$	88.7
B5	$Q_{ }^D$	90.6	$Q_{ }^D$	89.8
B6	$Q_{ }^D$	90.9	$Q_{ }^D$	88.2
B7	$Q_{ }^G$	137.9	$Q_{ }^G$	138.7
B8	$Q_{ }^G$	139.1	$Q_{ }^G$	134.4
B9	$Q_{ }^G$	141.0	$Q_{ }^G$	140.8
B10	$Q_{ }^G$	135.1	$Q_{ }^G$	133.9
B11	$Q_{ }^G$	132.7	$Q_{ }^G$	131.9
B12	$Q_{ }^G$	148.5	$Q_{ }^G$	130.5

C1	$Q_{ }^D$	93.1	$Q_{ }^D$	89.4
C2	$Q_{ }^D$	90.3	$Q_{ }^D$	90.5
C3	$Q_{ }^D$	93.8	$Q_{ }^D$	91.0
C4	$Q_{ }^D$	93.5	$Q_{ }^D$	91.5
C5	$Q_{ }^D$	89.8	$Q_{ }^D$	87.6
C6	$Q_{ }^D$	86.7	$Q_{ }^D$	86.6
C7	$Q_{ }^G$	135.9	$Q_{ }^G$	137.5
C8	$Q_{ }^G$	137.0	$Q_{ }^G$	139.6
C9	$Q_{ }^G$	139.0	$Q_{ }^G$	130.5
C10	$Q_{ }^G$	133.8	$Q_{ }^G$	133.6
C11	$Q_{ }^G$	133.0	$Q_{ }^G$	133.1
C12	$Q_{ }^G$	144.3	$Q_{ }^G$	145.2
D1	$Q_{ }^D$	90.0	$Q_{ }^D$	89.2
D2	$Q_{ }^D$	94.1	$Q_{ }^D$	93.5
D3	$Q_{ }^D$	94.2	$Q_{ }^D$	93.4
D4	$Q_{ }^D$	93.0	$Q_{ }^D$	89.1
D5	$Q_{ }^D$	91.3	$Q_{ }^D$	90.8
D6	$Q_{ }^D$	87.1	$Q_{ }^D$	84.9
D7	$Q_{ }^G$	135.5	$Q_{ }^G$	135.1
D8	$Q_{ }^G$	133.7	$Q_{ }^G$	125.0
D9	$Q_{ }^G$	136.7	$Q_{ }^G$	128.0
D10	$Q_{ }^G$	132.9	$Q_{ }^G$	133.2
D11	$Q_{ }^G$	133.2	$Q_{ }^G$	133.9
D12	$Q_{ }^G$	144.7	$Q_{ }^G$	144.4
E1	$Q_{ }^G$	139.8	$Q_{ }^G$	138.3
E2	$Q_{ }^G$	141.9	$Q_{ }^G$	141.8
E3	$Q_{ }^G$	144.9	$Q_{ }^G$	140.0
E4	$Q_{ }^G$	150.0	$Q_{ }^G$	151.3
E5	$Q_{ }^G$	138.9	$Q_{ }^G$	138.6
E6	$Q_{ }^G$	139.9	$Q_{ }^G$	140.3
E7	$Q_{ }^G$	139.9	$Q_{ }^G$	140.1
E8	$Q_{ }^G$	139.3	$Q_{ }^G$	139.2
E9	$Q_{ }^G$	140.9	$Q_{ }^G$	139.0
E10	$Q_{ }^G$	141.6	$Q_{ }^G$	140.5
E11	$Q_{ }^G$	141.2	$Q_{ }^G$	140.1
E12	$Q_{ }^G$	139.2	$Q_{ }^G$	140.8
F1	$Q_{ }^G$	137.2	$Q_{ }^G$	136.7
F2	$Q_{ }^G$	137.8	$Q_{ }^G$	138.2
F3	$Q_{ }^G$	140.9	$Q_{ }^G$	138.1
F4	$Q_{ }^G$	145.2	$Q_{ }^G$	144.9
F5	$Q_{ }^G$	139.4	$Q_{ }^G$	139.4
F6	$Q_{ }^G$	138.2	$Q_{ }^G$	138.2
F7	$Q_{ }^G$	138.8	$Q_{ }^G$	136.8
F8	$Q_{ }^G$	139.9	$Q_{ }^G$	139.9
F9 (I)	$Q_{ }^G$	141.5	$Q_{ }^G$	140.3
F9 (II)			$Q_{ }^D$	87.3
F10 (I)	$Q_{ }^G$	142.0	$Q_{ }^G$	141.9
F10 (II)			$Q_{ }^D$	88.2

F11	$Q_{ }^D$	87.8	$Q_{ }^D$	87.5
F12 (I)	$Q_{ }^G$	136.8	$Q_{ }^G$	140.1
F12 (II)			$Q_{ }^D$	87.2
G1	$Q_{ }^G$	138.3	$Q_{ }^G$	133.5
G2	$Q_{ }^G$	138.8	$Q_{ }^G$	132.0
G3	$Q_{ }^G$	140.2	$Q_{ }^G$	139.3
G4	$Q_{ }^G$	142.1	$Q_{ }^G$	139.8
G5	$Q_{ }^G$	137.1	$Q_{ }^G$	130.5
G6	$Q_{ }^G$	137.2	$Q_{ }^G$	137.2
G7	No D		$Q_{ }^G$	137.1
G8	$Q_{ }^G$	137.9	$Q_{ }^G$	138.1
G9 (I)	$Q_{ }^G$	137.6	$Q_{ }^G$	135.0
G9 (II)			$Q_{ }^D$	85.7
G10	$Q_{ }^G$	142.7	$Q_{ }^G$	141.9
G11	$Q_{ }^D$	84.9	$Q_{ }^D$	84.9
G12 (I)	$Q_{ }^G$	138.8	$Q_{ }^G$	134.8
G12 (II)			$Q_{ }^D$	86.9
H1	$Q_{ }^G$	128.9	$Q_{ }^G$	127.3
H2	$Q_{ }^G$	132.9	$Q_{ }^G$	125.2
H3	$Q_{ }^G$	135.2	$Q_{ }^G$	135.0
H4	$Q_{ }^G$	137.0	$Q_{ }^G$	137.7
H5	$Q_{ }^G$	132.2	$Q_{ }^G$	125.8
H6	$Q_{ }^G$	130.8	$Q_{ }^G$	124.7
H7	$Q_{ }^G$	129.6	$Q_{ }^G$	129.7
H8	$Q_{ }^G$	128.8	$Q_{ }^G$	129.6
H9	$Q_{ }^G$	128.8	$Q_{ }^G$	127.8
H10	$Q_{ }^G$	141.1	$Q_{ }^G$	141.5
H11	$Q_{ }^D$	78.9	$Q_{ }^D$	78.4
H12	$Q_{ }^D$	104.0	$Q_{ }^D$	104.8

Table S2. The phase adopted and associated lattice parameter adopted in the top and bottom sub-wells for each individual well in the 96-well plate 5 days after addition of PACT screen to monoolein. Errors, not listed, were generally $< 0.5 \text{ \AA}$. *No D indicated that no diffraction was observed. No screen was added to well H12.

	Top		Bottom	
	Phase	LP ($\text{\AA}$)	Phase	LP ($\text{\AA}$)
A1	$Q_{ }^D$	94.4	$Q_{ }^D$	92.8
A2	$Q_{ }^D$	91.9	$Q_{ }^D$	90.0
A3	$Q_{ }^D$	90.3	$Q_{ }^D$	89.5
A4	$Q_{ }^D$	88.1	$Q_{ }^D$	87.7
A5	$Q_{ }^D$	86.9	$Q_{ }^D$	87.2
A6	$Q_{ }^D$	87.5	$Q_{ }^D$	87.5
A7	$Q_{ }^G$	134.0	$Q_{ }^G$	135.2
A8	$Q_{ }^G$	138.3	$Q_{ }^G$	138.8

A9	$Q_{ }^G$	139.4	$Q_{ }^G$	132.5
A10	$Q_{ }^G$	129.9	$Q_{ }^G$	133.1
A11	$Q_{ }^G$	127.2	$Q_{ }^G$	128.0
A12	$Q_{ }^G$	129.4	$Q_{ }^G$	129.6
B1	$Q_{ }^D$	91.0	$Q_{ }^D$	91.1
B2	$Q_{ }^D$	91.8	$Q_{ }^D$	91.9
B3	$Q_{ }^D$	90.4	$Q_{ }^D$	89.9
B4	$Q_{ }^D$	88.5	$Q_{ }^D$	87.5
B5	$Q_{ }^D$	87.1	$Q_{ }^D$	87.4
B6 (I)	$Q_{ }^D$	86.9	$Q_{ }^D$	86.0
B6 (II)	$Q_{ }^G$	115.4	$Q_{ }^G$	115.0
B7	$Q_{ }^G$	133.9	$Q_{ }^G$	134.8
B8	$Q_{ }^G$	133.9	$Q_{ }^G$	135.0
B9	$Q_{ }^G$	131.5	$Q_{ }^G$	127.6
B10	$Q_{ }^G$	128.5	$Q_{ }^G$	129.1
B11	$Q_{ }^G$	125.4	$Q_{ }^G$	127.7
B12	$Q_{ }^G$	127.2	$Q_{ }^G$	127.2
C1	$Q_{ }^D$	89.7	$Q_{ }^D$	89.2
C2	$Q_{ }^D$	91.6	$Q_{ }^D$	90.0
C3	$Q_{ }^D$	91.0	$Q_{ }^D$	91.3
C4	$Q_{ }^D$	90.6	$Q_{ }^D$	89.3
C5	$Q_{ }^D$	86.7	$Q_{ }^D$	86.0
C6	$Q_{ }^D$	82.8	$Q_{ }^D$	82.7
C7	$Q_{ }^G$	132.5	$Q_{ }^G$	133.8
C8	$Q_{ }^G$	133.9	$Q_{ }^G$	134.5
C9	$Q_{ }^G$	132.4	$Q_{ }^G$	132.5
C10	$Q_{ }^G$	128.2	$Q_{ }^G$	130.0
C11	$Q_{ }^G$	128.5	$Q_{ }^G$	129.0
C12	$Q_{ }^G$	127.5	$Q_{ }^G$	127.9
D1	$Q_{ }^D$	91.1	$Q_{ }^D$	90.7
D2	$Q_{ }^D$	93.7	$Q_{ }^D$	89.6
D3	$Q_{ }^D$	90.7	$Q_{ }^D$	90.8
D4	$Q_{ }^D$	89.4	$Q_{ }^D$	87.9
D5	$Q_{ }^D$	88.1	$Q_{ }^D$	87.1
D6	$Q_{ }^D$	84.2	$Q_{ }^D$	82.8
D7	$Q_{ }^G$	129.6	$Q_{ }^G$	129.6
D8	$Q_{ }^G$	125.8	$Q_{ }^G$	126.3
		29.4^		29.9^
D9	$Q_{ }^G$	130.2	$Q_{ }^G$	130.0
D10	$Q_{ }^G$	128.2	$Q_{ }^G$	128.3
D11	$Q_{ }^G$	126.1	$Q_{ }^G$	127.4
D12	$Q_{ }^G$	134.0	$Q_{ }^G$	125.6
E1	$Q_{ }^G$	133.6	$Q_{ }^G$	132.8
E2	$Q_{ }^G$	136.2	$Q_{ }^G$	136.0
E3	$Q_{ }^G$	138.3	$Q_{ }^G$	138.5
E4	$Q_{ }^G$	144.4	$Q_{ }^G$	140.8
E5	$Q_{ }^G$	136.1	$Q_{ }^G$	128.7
E6	$Q_{ }^G$	136.4	$Q_{ }^G$	136.4

E7	$Q_{ }^G$	132.9	$Q_{ }^G$	134.3
E8	$Q_{ }^G$	134.6	$Q_{ }^G$	135.2
E9	$Q_{ }^G$	134.6	$Q_{ }^G$	134.9
E10	$Q_{ }^G$	134.4	$Q_{ }^G$	131.4
E11	$Q_{ }^D$	85.7	$Q_{ }^D$	85.5
E12	$Q_{ }^G$	135.3	$Q_{ }^G$	134.9
F1	$Q_{ }^G$	136.4	$Q_{ }^G$	133.7
F2	$Q_{ }^G$	133.9	$Q_{ }^G$	125.9
F3	$Q_{ }^G$	136.6	$Q_{ }^G$	135.1
F4	$Q_{ }^G$	139.6	$Q_{ }^G$	140.7
F5	$Q_{ }^G$	132.5	$Q_{ }^G$	130.2
F6	$Q_{ }^G$	133.6	$Q_{ }^G$	133.9
F7	$Q_{ }^G$	135.3	$Q_{ }^G$	135.3
F8	$Q_{ }^G$	136.8	$Q_{ }^G$	136.4
F9	$Q_{ }^G$	135.9	$Q_{ }^G$	135.8
F10	$Q_{ }^G$	135.5	$Q_{ }^G$	134.1
F11	$Q_{ }^D$	85.9	$Q_{ }^D$	86.1
F12	$Q_{ }^G$	135.1	$Q_{ }^G$	135.2
G1	$Q_{ }^G$	132.7	$Q_{ }^G$	128.0
G2	$Q_{ }^G$	130.9	$Q_{ }^G$	130.7
G3	$Q_{ }^G$	135.8	$Q_{ }^G$	129.3
G4	$Q_{ }^G$	137.6	$Q_{ }^G$	132.6
G5	$Q_{ }^G$	125.3	$Q_{ }^G$	125.1
G6	$Q_{ }^G$	131.1	$Q_{ }^G$	130.4
G7	$Q_{ }^G$	129.8	$Q_{ }^G$	127.7
G8	$Q_{ }^G$	132.3	$Q_{ }^G$	133.4
G9	$Q_{ }^G$	131.5	$Q_{ }^G$	131.9
G10	$Q_{ }^G$	136.6	$Q_{ }^G$	136.9
G11	$Q_{ }^D$	82.3	$Q_{ }^D$	82.2
G12	$Q_{ }^G$	131.3	$Q_{ }^G$	131.6
H1	$Q_{ }^G$	122.8	$Q_{ }^G$	121.7
H2	$Q_{ }^G$	125.9	$Q_{ }^G$	121.1
H3	$Q_{ }^G$	128.3	$Q_{ }^G$	127.6
H4	$Q_{ }^G$	130.0	$Q_{ }^G$	130.5
H5	$Q_{ }^G$	125.8	$Q_{ }^G$	126.3
H6	$Q_{ }^G$	125.0	$Q_{ }^G$	125.6
H7	$Q_{ }^G$	125.9	$Q_{ }^G$	125.1
H8	$H_{ }$	51.3	$H_{ }$	51.2
H9	$H_{ }$	49.9	$H_{ }$	50.1
H10	$Q_{ }^G$	135.9	$Q_{ }^G$	135.9
H11	$H_{ }$	49.7	$H_{ }$	49.7
H12	$Q_{ }^D$	105.4	$Q_{ }^D$	106.2

Table S3. The phase adopted and associated lattice parameter adopted in the top and bottom sub-wells for each individual well in the 96-well plate 7 days after addition of PACT screen to monoolein. Errors, not listed, were generally < 0.5 Å. No screen was added to well H12. ^Additional peak not assigned to any phase.

Top			Bottom	
	Phase	LP (Å)	Phase	LP (Å)
A1	No D		No D	
A2	No D		No D	
A3	$Q_{ }^G$	146.1	No D	
A4	$Q_{ }^G$	140.0	$Q_{ }^G$	126.3
A5	No D		No D	
A6	No D		No D	
A7	$Q_{ }^D$	84.1	No D	
A8	$Q_{ }^G$	139.3	No D	
A9	No D		No D	
A10	No D		No D	
A11	No D		No D	
A12	No D		$Q_{ }^G$	128.7
B1	$Q_{ }^D$	84.5	$Q_{ }^G$	125.4
B2	$Q_{ }^G$	129.6	$Q_{ }^G$	123.2
B3	$Q_{ }^G$	136.0	$Q_{ }^G$	130.8
B4	$Q_{ }^G$	136.8	$Q_{ }^G$	136.2
B5	$Q_{ }^G$	136.3	$Q_{ }^G$	135.2
B6	$Q_{ }^G$	137.0	$Q_{ }^G$	138.1
B7	$Q_{ }^G$	137.5	$Q_{ }^G$	135.1
B8	$Q_{ }^G$	129.2	$Q_{ }^G$	129.1
B9	$Q_{ }^G$	135.2	$Q_{ }^G$	131.8
B10	$Q_{ }^G$	133.0	$Q_{ }^G$	132.8
B11	$Q_{ }^G$	133.0	$Q_{ }^G$	132.3
B12	$Q_{ }^G$	134.8	$Q_{ }^G$	133.6
C1	$Q_{ }^G$	134.6	$Q_{ }^G$	134.1
C2	$Q_{ }^G$	133.5	$Q_{ }^G$	134.8
C3	$H_{ }$	51.3	No D	
C4	$Q_{ }^G$	134.4	$Q_{ }^G$	132.0
C5	$Q_{ }^G$	139.8	$Q_{ }^G$	137.3
C6	$Q_{ }^G$	136.7	$Q_{ }^G$	135.1
C7	$Q_{ }^G$	136.5	$Q_{ }^G$	135.4
C8	$Q_{ }^G$	137.8	$Q_{ }^D$	86.6
C9	$Q_{ }^G$	139.4	$Q_{ }^G$	139.8
C10	$Q_{ }^G$	138.5	$Q_{ }^G$	139.0
C11	$Q_{ }^G$	135.6	$Q_{ }^G$	136.1
C12	$Q_{ }^G$	133.2	$Q_{ }^G$	133.4
D1	$Q_{ }^G$	137.7	$Q_{ }^G$	138.0
D2	$Q_{ }^G$	134.9	$Q_{ }^G$	135.5
D3	$Q_{ }^G$	136.5	$Q_{ }^G$	137.0
D4	$Q_{ }^G$	138.5	$Q_{ }^G$	137.5
D5	$Q_{ }^G$	136.7	$Q_{ }^G$	136.8
D6	$Q_{ }^G$	138.4	$Q_{ }^G$	137.9
D7	$Q_{ }^G$	134.9	$Q_{ }^G$	135.9
D8	$Q_{ }^G$	135.1	$Q_{ }^G$	134.4

D9	$Q_{ }^G$	135.3	$Q_{ }^G$	135.2
D10	$Q_{ }^D$	87.0	$Q_{ }^D$	87.0
D11	$Q_{ }^G$	137.9	$Q_{ }^G$	138.1
D12	$Q_{ }^G$	135.6	$Q_{ }^G$	134.8
E1	$Q_{ }^G$	148.9	$Q_{ }^G$	150.1
E2	$Q_{ }^G$	134.6	$Q_{ }^G$	134.8
E3	$Q_{ }^G$	146.8	$Q_{ }^G$	146.8
E4	$Q_{ }^G$	135.9	$Q_{ }^G$	135.8
E5	$Q_{ }^G$	145.0	$Q_{ }^G$	145.4
E6	$Q_{ }^G$	135.7	$Q_{ }^G$	135.6
E7	$Q_{ }^G$	145.8	$Q_{ }^G$	145.1
E8	$Q_{ }^G$	134.0	$Q_{ }^G$	133.5
E9	$Q_{ }^G$	148.8	$Q_{ }^G$	148.3
E10	$Q_{ }^G$	134.6	$Q_{ }^G$	134.6
E11	$Q_{ }^G$	149.6	$Q_{ }^G$	149.2
E12	$Q_{ }^G$	131.7	$Q_{ }^G$	135.3
F1	$Q_{ }^G$	147.2	$Q_{ }^G$	146.5
F2	$Q_{ }^G$	135.8	$Q_{ }^G$	136.1
F3	$Q_{ }^G$	145.3	$Q_{ }^G$	145.7
F4	$Q_{ }^G$	136.4	$Q_{ }^G$	136.3
F5	$Q_{ }^G$	145.2	$Q_{ }^G$	145.2
F6	$Q_{ }^G$	135.5	$Q_{ }^G$	136.0
F7	$Q_{ }^G$	148.5	$Q_{ }^G$	148.9
F8	$Q_{ }^G$	136.6	$Q_{ }^G$	135.8
F9	$Q_{ }^G$	145.1	$Q_{ }^G$	144.3
F10	$Q_{ }^G$	136.3	$Q_{ }^G$	136.3
F11	$Q_{ }^G$	147.6	$Q_{ }^G$	147.6
F12	$Q_{ }^G$	132.6	$Q_{ }^G$	132.7
G1	$Q_{ }^G$	149.7	$Q_{ }^G$	150.3
G2	$Q_{ }^G$	139.7	$Q_{ }^G$	137.6
G3	$Q_{ }^G$	146.3	$Q_{ }^G$	147.6
G4	$Q_{ }^G$	129.5	$Q_{ }^G$	130.5
G5	$Q_{ }^G$	144.9	$Q_{ }^G$	146.0
G6	$Q_{ }^G$	133.8	$Q_{ }^G$	135.2
G7	$Q_{ }^G$	136.3	$Q_{ }^G$	142.8
G8	$Q_{ }^G$	142.1	$Q_{ }^G$	142.0
G9	$Q_{ }^G$	132.7	$Q_{ }^G$	131.8
G10	$Q_{ }^G$	128.8	$Q_{ }^G$	128.2
G11	$H_{ }$	49.7	$H_{ }$	50.5
G12	$Q_{ }^G$	141.4	$Q_{ }^G$	141.3
H1	$Q_{ }^G$	141.2	$Q_{ }^G$	135.8
H2	$Q_{ }^G$	140.7	$Q_{ }^G$	140.0
H3	$Q_{ }^G$	133.9	$Q_{ }^G$	131.7
H4	$Q_{ }^G$	126.1	$Q_{ }^G$	126.3
H5	$H_{ }$	51.7	$H_{ }$	51.5
H6	$Q_{ }^G$	139.4	$Q_{ }^G$	133.8
H7	$Q_{ }^G$	141.3	$Q_{ }^G$	132.4
H8	$Q_{ }^G$	131.7	$Q_{ }^G$	130.8

H9	$Q_{ }^G$	145.0	$Q_{ }^G$	144.8
H10	$Q_{ }^G$	135.2	$Q_{ }^G$	134.4
H11	$Q_{ }^G$	147.3	$Q_{ }^G$	144.3
H12	$Q_{ }^G$	128.6	$Q_{ }^G$	127.3

Table S4. The phase adopted and associated lattice parameter adopted in the top and bottom sub-wells for each individual well in the 96-well plate 21 days after addition of PACT screen to monoolein. Errors, not listed, were generally $< 0.5 \text{ \AA}$. *No D indicated that no diffraction was observed.