

Table S1. Lipid composition of Comirnaty and Doxebo

Comirnaty*				Doxebo**			Dox/CMT
	Lipid	mg/mL	%	Lipid	mg/mL	%	
Ionizable lipid (ALC-0315)	((4-hydroxybutyl) azanediyl) bis (hexane-6,1-diyl)bis(2-hexyldecanoate))	1.43	55.8	none	0	0	
Phospholipid	1,2-distearoyl-sn-glycero-3-phosphocholine	0.3	11.7	Fully hydrogenated soy phosphatidylcholine	9.58	60	5.1
Cholesterol	Cholest-5-en-3 β -ol	0.67	26	Cholest-5-en-3 β -ol	3.19	20	0.8
PEGylated lipid (ALC-0159)	(2-((polyethylene glycol)-2000)-N,N-ditetradecylacetamide))	0.17	6.5	N-(carbonyl-methoxypolyethylene glycol 2000)-1,2-distearoyl-sn-glycero-3-phosphoethanolamine	3.19	20	3.1
Total		2.57	100		15.96	100	6.2
Membrane forming phospholipids			18			80	4.4

*Data from Ref. 110. **, Data based on the lipid composition of Doxil¹⁰⁸

Table S2. SARS-CoV-2 mRNA does not activate human complement

	C4d (µg/ml)	Bb (µg/ml)	sC5b-9 (µg/ml)
PBS	2.6	10	2.6
Comirnaty	5.1	17.2	5.5
SARS-CoV mRNA*	2.7	9.6	1.7
Zymosan	8.6	47.1	142.2

Experiments conducted in a serum different from those applied in Figure 4. All experimental details are the same as described for Figure 4. *, 20 µg/mL

Table S3. CD40L (moCD40L gene) mRNA sequence, 1,200 nt

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AGGCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACAT
CCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCG
GCGGGTTTCTGACATCCGGCGGGTTTCTGACATTACAACCAGGCCTCCACAACCATGGTCGAGACATACAGCCA
GCCCAGCCCCAGAAGTGTGGCCACAGGCCTGCCCCGCCAGCATGAAAATCTTTATGTATCTGCTGACCGTGTTCCT
GATCACCCAGATGATCGGCAGCGTGCTGTTCCGGCTGTATCTGCACAGACGGCTGGACAAGGTGGAGGAAGAAG
TGAATCTGCACGAGGACTTCGTGTTTCATCAAGAAGCTGAAGCGCTGCAACAAGGGCGAGGGCAGCCTGAGCCT
GCTGAACTGCGAGGAAATGAGAAGGCAGTTCGAGGACCTGGTGAAGGACATCACCTGAACAAAGAGGAAAA
GAAAGAAAACAGCTTCGAGATGCAGAGAGGCGACGAAGATCCTCAGATCGCAGCCCACGTGGTGTCTGAGGCC
AACAGCAACGCCGCCAGCGTGCTGCAGTGGGCCAAGAAAGGCTACTACACCATGAAGTCCAACCTGGTGATGC
TGGAAAACGGCAAGCAGCTGACCGTGAAGAGAGAAGGCCTGTACTACGTGTACACCCAGGTGACATTCTGCAG
CAACAGAGAGCCCAGCAGCCAGAGGCCTTTCATCGTGGGCCTGTGGCTGAAGCCTAGCAGCGGCAGCGAGAGA
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TGTTCGAACTGCAGGCAGGCGCCAGCGTGTTCTGTGAACGTGACCGAGGCCAGCCAGGTGATCCACAGAGTGGG
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CCAGTGACCAGACGGCAAGGTTTTTATCCCAGTGTATATTGTCGACAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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*batch: RG-mRNA-moCD40L-200806)-N1UCC-Si

Table S4. Luciferase (rstsFluc gene) mRNA sequence (1,450 nt)

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AGGCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCG
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TAAAGAAAGGCCCGGCGCCATTCTATCCTCTAGAGGATGGAACCGCTGGAGAGCAACTGCATAAGGCTATGAAG
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TTCGAAATGTCCGTTCCGTTGGCAGAAGCTATGAAACGATATGGGCTGAATACAAATCACAGAATCGTCGTATGC
AGTGAAAACCTCTCTCAATTCTTATGCCGGTGTGGGCGCGTTATTATCGGAGTTGCAGTTGCGCCCGCGAACG
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AAAGTTGCGCGGAGGAGTTGTGTTTGTGGACGAAGTACCGAAAGGTTTACCGGAAAACTCGACGCAAGAAAA
ATCAGAGAGATCCTCATAAAGGCCAAGAAGGGCGGAAAGTCCAAATTGTAACCTCGAGTGTGTTGGCTGGGTTTTT
CCTTGTTTCGACCGGACACCTCCAGTGACCAGACGGCAAGGTTTTATCCCAGTGTATATTGTCGACAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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*batch: RG-mRNA-pETRCC-tsrsfluc_200623-N1UCC_Si).

Table S5. Cre-recombinase (Cre) gene mRNA sequence (2,086 nt)*

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AGGCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACATCCGGCGGGTTTCTGACAT
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GCGGGTTTCTGACATCCGGCGGGTTTCTGACATTACAACCAGGCCTCCACAACCATGTCTAACTTGTGACTGTT
CATCAGAAATCTTCTGCCTTGCCCGTAGATGCTACAAGTGACGAAGTACGGAAGAATCTCATGGATATGTTTCGA
GATAGACAAGCTTTTTCAGAGCATACATGGAAGATGCTGTTGTCTGTGTGCCGAAGCTGGGCTGCTTGGTGTA
TTGAATAACAGGAAATGGTTTCTGCAGAACCTGAAGATGTACGGGACTATCTGCTGTATCTGCAAGCTAGAGGA
CTTGCCGTCAAGACAATCCAGCAACATCTCGGACAACCTGAATATGTTGCATAGAAGATCCGGCCTGCCTCGGCCA
AGTGACTCAAACGCTGTGTCACCTGGTGATGCGAAGGATACGGAAGAAAATGTAGACGCCGGGAAAGGGCTA
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TTAAAGACATCAGCAGGACTGATGGCGGCAGGATGCTCATTACATTGGGCGCACTAAGACTCTCGTCTCTACTG
CTGGCGTCGAAAAAGCTTTGTCTCTCGGTGTCACTAACTCGTCGAGCGCTGGATCTCTGTTTCTGGTGTGCTGA
CGACCCCAACAACCTACTTGTGTTTGGCGCTGAGGAAGAACGGGGTTGCCGCCCCAGTGCTACATCTCAACTGTC
AACCCGAGCACTCGAAGGAATCTTCGAGGCTACACACCGATTGATATACGGGGCTAAGGATGATAGTGGGCAGC
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TGGTGCAATGGTACGGTTGCTCGAAGATGGTGACTAACTCGAGTGTGTTTGGCTGGGTTTTCTTGTTCGCACCGG
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AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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*batch: RG-mRNA-pETRCC-Cre-200723_N1UCC_Si)