

Supplementary Materials for

SARS-CoV-2 BA.1 variant is neutralized by vaccine booster-elicited serum, but evades most convalescent serum and therapeutic antibodies

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The PDF file includes:

Tables S1 and S2

Other Supplementary Material for this manuscript includes the following:

MDAR Reproducibility Checklist

1 **Supplementary Materials**

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3 **Table S1. Genotypes of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)**
 4 **isolated from infected individuals.**

Sample #	Pangolin	Spike Substitutions	Spike Deletions	Accession
	3.1.17 (2021-12-06)			
Conv-01	AY.74	T19R, G142D, R158G, A222V, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000262
Conv-02	AY.25	T19R, S112L, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000263
Conv-03	AY.47	T19R, G142D, R158G, A222V, V289I, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000264
Conv-04	B.1.617.2	T19R, K77T, G142D, R158G, G181V, L452R, T478K, D614G, A653V, P681R, D950N	E156-, F157-	OM000265
Conv-05	B.1.617.2	T19R, K77T, G142D, R158G, G181V, L452R, T478K, D614G, A653V, P681R, D950N	E156-, F157-	OM311576
Conv-06	AY.14	T19R, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000266
Conv-07	AY.14	T19R, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000267
Conv-08	AY.25	T19R, S112L, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000268
Conv-09	B.1.617.2	T19R, T95I, G142D, R158G, L452R, T478K, D614G, P681R, D950N, G1124V	E156-, F157-	OM000269
Conv-10	AY.62	T19R, G142D, R158G, A222V, L452R, T478K, D614G, P681R, G946V, D950N	E156-, F157-	OM000270
Conv-11	AY.25	T19R, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000271
Conv-12	AY.44	T19R, T22I, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000272
Conv-13	AY.119	T19R, T95I, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000273
Conv-14	B.1.617.2	T19R, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000274
Conv-16	B.1.617.2	T19R, T95I, G142D, R158G, L452R, T478K, D614G, P681R, D950N	E156-, F157-	OM000276
Conv-18*	B.1.351			
Conv-19	B.1.351	D80A, D215G, K417N, E484K, N501Y, D614G, A701V		OM000278
Conv-20	B.1	D614G		OM000279
Conv-21	B.1	D614G		OM000280

Conv-22	B.1	D614G		OM000281
Conv-23	B.1	D614G		OM000282
Conv-24	B.1	D614G		OM000283
Conv-25	B.1	D614G		OM000284
Conv-26	B.1	D614G		OM000285
Conv-27	B.1	D614G		OM000286
Conv-28	B.1	D614G		OM000287
Conv-29	B.1	D614G		OM000288
Conv-30	B.1.1.7	N501Y, A570D, D614G, P681H, T716I, S982A, D1118H	H69-, V70-, Y144-	OM000289
Conv-31	B.1.1.7	N501Y, A570D, D614G, P681H, T716I, S982A, D1118H	H69-, V70-, Y144-	OM000290
Conv-32	B.1.1.7	N501Y, A570D, D614G, P681H, T716I, S982A, D1118H, K1191N	H69-, V70-, Y144-	OM000291
Conv-33	B.1.1.7	N501Y, A570D, D614G, P681H, T716I, S982A, D1118H	H69-, V70-, Y144-	OM000292
Conv-35	B.1.2	D614G		OM000294
Conv-36	B.1.2	G257D, D614G		OM000295
Conv-37	B.1.2	D614G		OM000296
Conv-38	B.1.2	D614G		OM000297
Conv-39	B.1.2	D614G		OM000298
Conv-40	B.1.2	D614G		OM000299

5 *The SARS-CoV-2 sequence information from this individual was not available.

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8 **Table S2. NT₅₀ values for each convalescent serum sample against D614G, Delta, and**
 9 **Omicron.**

Sample #	Variant	D614G		Delta		Omicron	
		Mean	SD	Mean	SD	Mean*	SD
Conv-20	B.1	1626.5	213.7	6135.0	654.8	259.4	16.0
Conv-21	B.1	2333.3	355.9	1717.5	682.4	20.0	
Conv-22	B.1	392.4	67.3	267.0	58.4	20.0	
Conv-23	B.1	1121.4	415.9	95.1	32.5	20.0	
Conv-24	B.1	177.1	36.6	174.6	26.4	20.0	
Conv-25	B.1	2781.2	885.0	3068.0	502.0	72.0	14.6
Conv-26	B.1	2116.5	473.0	2602.5	415.1	20.0	
Conv-27	B.1	80.5	24.2	34.5	20.5	20.0	
Conv-28	B.1	1849.8	320.6	122.3	16.2	20.0	
Conv-29	B.1	92.2	28.5	20.0		20.0	
Conv-35	B.1.2	393.9	92.2	1384.2	523.5	20.0	
Conv-36	B.1.2	3375.0	807.0	1890.0	8.5	20.0	
Conv-37	B.1.2	1012.5	137.6	675.1	199.2	20.0	
Conv-38	B.1.2	1484.3	145.3	399.1	28.2	20.0	
Conv-39	B.1.2	427.0	68.3	458.7	143.0	20.0	
Conv-40	B.1.2	226.4	36.9	452.1	77.6	20.0	
Conv-30	B.1.1.7	1191.3	168.4	472.2	206.0	20.0	
Conv-31	B.1.1.7	37112.2	8284.0	13937.5	2715.9	100.0	17.9
Conv-32	B.1.1.7	10178.0	2532.0	6054.5	1967.4	20.0	
Conv-33	B.1.1.7	369.6	89.6	412.9	174.1	20.0	
Conv-18	B.1.351	166.2	33.7	94.1	22.6	61.3	15.6
Conv-19	B.1.351	1110.5	249.3	852.7	242.0	189.2	31.7
Conv-4	B.1.617.2	42.0	2.4	130.4	4.5	20.0	
Conv-5	B.1.617.2	610.0	76.4	1389.5	364.2	65.7	6.7
Conv-9	B.1.617.2	176.0	7.3	2217.0	165.5	57.6	10.8
Conv-14	B.1.617.2	1250.0	35.4	64680.5	2305.9	381.7	55.0
Conv-16	B.1.617.2	20533.7	4313.7	14482.0	1968.6	224.1	28.0
Conv-1	AY.74	322.6	44.5	8303.0	2190.6	61.2	19.4
Conv-2	AY.25	2368.5	67.2	58860.0	19859.8	1713.0	217.8
Conv-3	AY.47	8832.5	1451.7	44544.5	9013.5	299.8	29.6
Conv-6	AY.14	303.4	44.4	13762.5	1501.2	31.2	15.9
Conv-7	AY.14	129.2	29.4	640.5	30.5	20.0	
Conv-8	AY.25	1195.0	15.6	7733.0	553.0	126.4	5.7

Conv-10	AY.62	1594.0	202.2	31861.0	6280.5	81.5	8.8
Conv-11	AY.25	160.6	2.6	1950.5	299.1	72.1	14.5
Conv-12	AY.44	2520.0	383.3	24904.5	4666.2	1921.0	1189.4
Conv-13	AY.119	1260.0	164.0	22082.5	6200.6	344.0	61.3

10 *Titers below the lowest dilution tested (1:40 dilution) were set as 20. NT₅₀ = 50%

11 neutralization titer. SD standard deviation.

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