

FR to Ab class 1

Wuhan-Hu-1	1.00	9.87	61.85	61.85	9.29	9.02	30.85	221.15	170.76
Alpha	9.87	1.00	47.32	47.32	20.07	19.78	19.10	192.31	146.44
Beta	61.85	47.32	1.00	1.00	76.89	76.46	37.77	98.42	67.28
Gamma	61.85	47.32	1.00	1.00	76.89	76.46	37.77	98.42	67.28
Delta	9.29	20.07	76.89	76.89	1.00	13.79	43.01	207.69	195.92
Lambda	9.02	19.78	76.46	76.46	13.79	1.00	42.65	250.13	195.19
Mu	30.85	19.10	37.77	37.77	43.01	42.65	1.00	173.36	106.93
Omicron	221.15	192.31	98.42	98.42	207.69	250.13	173.36	1.00	214.62
PMS20	170.76	146.44	67.28	67.28	195.92	195.19	106.93	214.62	1.00
	Wuhan-Hu-1	Alpha	Beta	Gamma	Delta	Lambda	Mu	Omicron	PMS20

FR to Ab class 2

Wuhan-Hu-1	1.00	1.26	62.14	62.14	25.55	69.12	71.64	143.80	123.70
Alpha	1.26	1.00	60.12	60.12	27.13	71.25	69.50	140.76	120.90
Beta	62.14	60.12	1.00	1.00	103.56	174.21	11.02	50.36	37.97
Gamma	62.14	60.12	1.00	1.00	103.56	174.21	11.02	50.36	37.97
Delta	25.55	27.13	103.56	103.56	1.00	38.45	115.49	197.80	180.84
Lambda	69.12	71.25	174.21	174.21	38.45	1.00	190.27	312.30	278.31
Mu	71.64	69.50	11.02	11.02	115.49	190.27	1.00	66.93	30.33
Omicron	143.80	140.76	50.36	50.36	197.80	312.30	66.93	1.00	101.48
PMS20	123.70	120.90	37.97	37.97	180.84	278.31	30.33	101.48	1.00
	Wuhan-Hu-1	Alpha	Beta	Gamma	Delta	Lambda	Mu	Omicron	PMS20

FR to Ab class 3

Wuhan-Hu-1	1.00	7.38	23.31	23.31	22.56	34.09	56.42	266.29	171.63
Alpha	7.38	1.00	14.83	14.83	31.61	43.99	45.66	241.10	152.95
Beta	23.31	14.83	1.00	1.00	51.14	65.35	31.61	197.04	120.27
Gamma	23.31	14.83	1.00	1.00	51.14	65.35	31.61	197.04	120.27
Delta	22.56	31.61	51.14	51.14	1.00	15.32	91.71	325.92	232.91
Lambda	34.09	43.99	65.35	65.35	15.32	1.00	109.74	391.16	264.22
Mu	56.42	45.66	31.61	31.61	91.71	109.74	1.00	290.92	73.65
Omicron	266.29	241.10	197.04	197.04	325.92	391.16	290.92	1.00	378.85
PMS20	171.63	152.95	120.27	120.27	232.91	264.22	73.65	378.85	1.00
	Wuhan-Hu-1	Alpha	Beta	Gamma	Delta	Lambda	Mu	Omicron	PMS20

FR to Ab class 4

Wuhan-Hu-1	1.00	13.31	34.45	34.45	5.83	6.24	27.07	202.09	74.63
Alpha	13.31	1.00	18.66	18.66	19.91	20.38	12.14	166.61	54.12
Beta	34.45	18.66	1.00	1.00	42.29	42.85	14.74	124.69	29.88
Gamma	34.45	18.66	1.00	1.00	42.29	42.85	14.74	124.69	29.88
Delta	5.83	19.91	42.29	42.29	1.00	5.73	34.48	203.57	84.81
Lambda	6.24	20.38	42.85	42.85	5.73	1.00	35.00	220.96	85.53
Mu	27.07	12.14	14.74	14.74	34.48	35.00	1.00	157.81	37.43
Omicron	202.09	166.61	124.69	124.69	203.57	220.96	157.81	1.00	142.82
PMS20	74.63	54.12	29.88	29.88	84.81	85.53	37.43	142.82	1.00
	Wuhan-Hu-1	Alpha	Beta	Gamma	Delta	Lambda	Mu	Omicron	PMS20