

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 -	1.00	1.00	47.32	47.32	9.29	9.02	19.10	192.31	146.44
Beta -	1.00	1.00	1.00	1.00	9.29	9.02	5.54	98.42	67.28
Gamma -	1.00	1.00	1.00	1.00	9.29	9.02	5.54	98.42	67.28
Delta -	1.00	9.87	61.85	61.85	1.00	6.54	30.85	200.69	170.76
Lambda -	1.00	9.87	61.85	61.85	6.80	1.00	30.85	221.15	170.76
Mu -	1.00	1.00	30.54	30.54	9.29	9.02	1.00	159.02	106.93
Omicron -	1.00	1.00	1.00	1.00	2.33	9.02	5.54	1.00	62.87
PMS20 -	1.00	1.00	1.00	1.00	9.29	9.02	1.00	93.18	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	1.00	1.00	60.12	60.12	25.55	69.12	69.50	140.76	120.90
Beta	1.00	1.00	1.00	1.00	25.55	69.12	8.41	50.36	37.97
Gamma	1.00	1.00	1.00	1.00	25.55	69.12	8.41	50.36	37.97
Delta	1.00	1.26	62.14	62.14	1.00	36.57	71.64	140.48	123.70
Lambda	1.00	1.26	62.14	62.14	1.38	1.00	71.64	143.80	123.70
Mu	1.00	1.00	2.41	2.41	25.55	69.12	1.00	53.98	30.33
Omicron	1.00	1.00	1.00	1.00	23.84	69.12	8.41	1.00	35.97
PMS20	1.00	1.00	1.00	1.00	25.55	69.12	1.00	48.18	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 -	1.00	1.00	14.83	14.83	22.56	34.09	45.66	241.10	152.95
Beta -	1.00	1.00	1.00	1.00	22.56	34.09	29.20	197.04	120.27
Gamma -	1.00	1.00	1.00	1.00	22.56	34.09	29.20	197.04	120.27
Delta -	1.00	7.38	23.31	23.31	1.00	12.32	56.42	256.78	171.63
Lambda -	1.00	7.38	23.31	23.31	2.67	1.00	56.42	266.29	171.63
Mu -	1.00	1.00	1.86	1.86	22.56	34.09	1.00	202.56	73.65
Omicron -	1.00	1.00	1.00	1.00	19.38	34.09	29.20	1.00	88.44
PMS20 -	1.00	1.00	1.00	1.00	22.56	34.09	1.00	154.11	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	1.00	1.00	18.66	18.66	5.83	6.24	12.14	166.61	54.12
Beta	1.00	1.00	1.00	1.00	5.83	6.24	4.14	124.69	29.88
Gamma	1.00	1.00	1.00	1.00	5.83	6.24	4.14	124.69	29.88
Delta	1.00	13.31	34.45	34.45	1.00	3.02	27.07	194.37	74.63
Lambda	1.00	13.31	34.45	34.45	2.62	1.00	27.07	202.09	74.63
Mu	1.00	1.00	10.18	10.18	5.83	6.24	1.00	147.57	37.43
Omicron	1.00	1.00	1.00	1.00	3.13	6.24	4.14	1.00	18.48
PMS20	1.00	1.00	1.00	1.00	5.83	6.24	1.00	104.95	1.00
Wuhan-Hu-1	Alpha	Beta	Gamma	Delta	Lambda	Mu	Omicron	PMS20	