



DATA SHEET

REAGENT	Acid/heat inactivated SARS-CoV-2 Omicron (BA.1 sub lineage)
REPOSITORY REFERENCE	101047
LOT NUMBER	07012022
DESCRIPTION	Passage 3 Omicron isolate (BA.1) grown in the Vero/hSLAM cell line was inactivated with acetic acid and heat treatment. FFU/mL in VeroE6 of the infectious stock (NIBSC #101044): 2.74 x 1e5
PROVIDED	0.5mL (liquid)
SEQUENCE	

In blue are Omicron (BA.1) defining mutations (<https://outbreak.info>). All mutations are present except ORF8, Ser84→Leu. Details about the sequencing protocol is available on request.

Position (NC_045512.2)	Ref	Alt	Proportion	Gene	Variation
21	C	T	1.0000	CHR_START-ORF1ab	n.21C>T
241	C	T	0.9992	CHR_START-ORF1ab	n.241C>T
2832	A	G	0.9996	ORF1ab	p.Lys856Arg
3037	C	T	0.9992	ORF1ab	p.Phe924Phe
3892	G	T	0.0165	ORF1ab	p.Glu1209Asp
5386	T	G	0.9996	ORF1ab	p.Ala1707Ala
5924	G	A	0.9996	ORF1ab	p.Val1887Ile
6512	AGTT	A	0.9915	ORF1ab	p.Ser2083_Leu2084delinsIle
6696	C	CT	0.0576	ORF1ab	p.Leu2146fs
8393	G	A	0.9995	ORF1ab	p.Ala2710Thr
9502	C	T	0.0123	ORF1ab	p.Ala3079Ala
9852	A	G	0.0499	ORF1ab	p.Asp3196Gly
10029	C	T	0.9988	ORF1ab	p.Thr3255Ile
10449	C	A	0.9983	ORF1ab	p.Pro3395His
11250	G	T	0.8200	ORF1ab	p.Arg3662Leu
11282	AGTTTGCTG	A	0.9446	ORF1ab	p.Leu3674_Gly3676del
11522	T	G	0.0129	ORF1ab	p.Phe3753Val
11537	A	G	0.9995	ORF1ab	p.Ile3758Val
11750	C	T	0.0684	ORF1ab	p.Leu3829Phe
13195	T	C	0.9996	ORF1ab	p.Val4310Val
14408	C	T	0.9996	ORF1ab	p.Pro4715Leu
15240	C	T	0.9961	ORF1ab	p.Asn4992Asn
18163	A	G	0.9357	ORF1ab	p.Ile5967Val

National Institute for Biological Standards and Control

19983	C	T	0.0132	ORF1ab	p.Val6573Val
21762	C	T	0.9992	S	p.Ala67Val
21764	ATACATG	A	0.9946	S	p.His69_Val70del
21846	C	T	0.9995	S	p.Thr95Ile
21986	GGTGTATT	G	0.9626	S	p.Gly142_Tyr145delinsAsp
22193	AATT	A	0.9206	S	p.Asn211_Leu212delinsIle
22204	T	TGAGCCAGAA	0.9207	S	p.Arg214_Asp215insGluProGlu
22578	G	A	0.9997	S	p.Gly339Asp
22673	T	C	0.9992	S	p.Ser371Pro
22674	C	T	0.9991	S	p.Ser371Phe
22679	T	C	0.9996	S	p.Ser373Pro
22686	C	T	0.9990	S	p.Ser375Phe
22813	G	T	0.9997	S	p.Lys417Asn
22882	T	G	0.9997	S	p.Asn440Lys
22898	G	A	0.9997	S	p.Gly446Ser
22992	G	A	0.9995	S	p.Ser477Asn
22995	C	A	0.9999	S	p.Thr478Lys
23013	A	C	0.9997	S	p.Glu484Ala
23040	A	G	0.9994	S	p.Gln493Arg
23048	G	A	0.9984	S	p.Gly496Ser
23055	A	G	0.9996	S	p.Gln498Arg
23063	A	T	0.9996	S	p.Asn501Tyr
23075	T	C	0.9997	S	p.Tyr505His
23202	C	A	0.9996	S	p.Thr547Lys
23403	A	G	0.9998	S	p.Asp614Gly
23525	C	T	0.9997	S	p.His655Tyr
23599	T	G	0.9998	S	p.Asn679Lys
23604	C	A	0.9997	S	p.Pro681His
23664	C	T	0.9976	S	p.Ala701Val
23854	C	A	0.9993	S	p.Asn764Lys
23948	G	T	0.9996	S	p.Asp796Tyr
24130	C	A	0.9996	S	p.Asn856Lys
24424	A	T	0.9997	S	p.Gln954His
24469	T	A	0.9989	S	p.Asn969Lys
24503	C	T	0.9959	S	p.Leu981Phe
25000	C	T	0.9996	S	p.Asp1146Asp
25584	C	T	0.9993	ORF3a	p.Thr64Thr
26270	C	T	0.9995	E	p.Thr9Ile
26436	T	C	0.0161	E	p.Asn64Asn
26530	A	G	0.9994	M	p.Asp3Gly
26577	C	G	0.9996	M	p.Gln19Glu
26709	G	A	0.9996	M	p.Ala63Thr
27259	A	C	0.9996	ORF6	p.Arg20Arg
27807	C	T	0.9997	ORF7b	p.Leu18Leu
28271	A	T	0.9993	intergenic_region	n.28271A>T
28311	C	T	0.9992	N	p.Pro13Leu
28361	GGAGAACGCA	G	0.9363	N	p.Glu31_Ser33del

National Institute for Biological Standards and Control

28531	C	T	0.0202	N	p.Tyr86Tyr
28881	G	A	0.9996	N	p.Arg203Lys
28882	G	A	0.9993	N	p.Arg203Arg
28883	G	C	0.9994	N	p.Gly204Arg

APPLICATIONS

Nucleic acid tests, antigen tests.

DEPOSITOR

Original virus (passage 2) received from Dr Kevin Bewley, UK Health Security Agency, Medical Interventions Group, Porton Down, UK. Passage 3 virus grown, characterised and inactivated by CFAR.

ACKNOWLEDGMENTS

Acknowledgment for publications should read "The following reagent was obtained from the Centre For AIDS Reagents, NIBSC, UK: Acid/heat treated Omicron (BA.1) (NIBSC #101047), thanks to the contribution of Dr Kevin Bewley and Dr Yann Le Duff".

MATERIAL SAFETY DATA SHEET

Physical properties (at room temperature)			
Physical appearance	Pink/Yellow, liquid		
Fire hazard	None		
Chemical properties			
Stable	Yes	Corrosive:	No
Hygroscopic	No	Oxidising:	No
Flammable	No	Irritant:	No
Other: This product is an inactivated viral culture; It is the responsibility of the end user to seek local biosafety approval for the storage and handling of the material in their workplace			
Handling: CAUTION - This preparation is not for administration to humans or animals in the human food chain. As with all materials of biological origin, this preparation should be regarded as potentially hazardous to health. It should be used and discarded according to your own laboratory's safety procedures. Such safety procedures should include the wearing of protective gloves and avoiding the generation of aerosols.			
Toxicological properties			
Effects of inhalation:	Not established, avoid inhalation		
Effects of ingestion:	Not established, avoid ingestion		
Effects of skin absorption:	Not established, avoid contact with skin		
Suggested First Aid			
Inhalation	Seek medical advice		
Ingestion	Seek medical advice		
Contact with eyes	Wash with copious amounts of water. Seek medical advice.		
Contact with skin	Wash thoroughly with water.		
Action on Spillage and Method of Disposal			
Spillage of vial contents should be taken up with absorbent material wetted with a virucidal agent. Rinse area with a virucidal agent followed by water.			
Absorbent materials used to treat spillage should be treated as biologically hazardous waste.			