# DATA SHEET

| | |
|---|---|
| REAGENT | SARS-CoV-2 isolate - Delta (AY.1 sub-lineage) - infectious |
| REPOSITORY REFERENCE | 101033 |
| LOT NUMBER | 28092021 |
| DESCRIPTION | Passage 4 AY.1 isolate grown in the Vero/hSLAM cell line. Originally isolated and passaged in the Vero/hSLAM cell line by UKHSA. Mycoplasma undetectable, sterility checked.<br><br>TCID50/mL in VeroE6: 7.80 x 1e6 |
| PROVIDED | 1mL of clarified culture supernatant |

SEQUENCE

In blue are AY.1 defining mutations (https://outbreak.info). All mutations are present. Details about the sequencing protocol is available on request.

**~30% of the viral population contains a 6 aa deletion in the furin cleavage site.**

| Position (NC_045512.2) | Ref | Alt | Proportion | Gene | HGVSp |
|---|---|---|---|---|---|
| 71 | C | A | 0.0170695 | CHR_START-ORF1ab | N/A |
| 210 | G | T | 0.9994885 | CHR_START-ORF1ab | N/A |
| 241 | C | T | 0.9987795 | CHR_START-ORF1ab | N/A |
| 954 | G | T | 0.9789365 | ORF1ab | p.Cys230Phe |
| 3037 | C | T | 0.9982405 | ORF1ab | p.Phe924Phe |
| 4181 | G | T | 0.994951 | ORF1ab | p.Ala1306Ser |
| 6402 | C | T | 0.999402 | ORF1ab | p.Pro2046Leu |
| 7124 | C | T | 0.9993655 | ORF1ab | p.Pro2287Ser |
| 7267 | C | T | 0.825926 | ORF1ab | p.Phe2334Phe |
| 8986 | C | T | 0.999051 | ORF1ab | p.Asp2907Asp |
| 9053 | G | T | 0.999618 | ORF1ab | p.Val2930Leu |
| 9502 | C | T | 0.01189885 | ORF1ab | p.Ala3079Ala |
| 10029 | C | T | 0.9988075 | ORF1ab | p.Thr3255Ile |
| 10047 | T | G | 0.0142402 | ORF1ab | p.Val3261Gly |
| 10116 | C | T | 0.01226375 | ORF1ab | p.Thr3284Ile |
| 11201 | A | G | 0.978689 | ORF1ab | p.Thr3646Ala |
| 11332 | A | G | 0.999587 | ORF1ab | p.Val3689Val |
| 13046 | C | G | 0.0129401 | ORF1ab | p.Pro4261Ala |
| 13048 | T | A | 0.01265 | ORF1ab | p.Pro4261Pro |
| 13049 | G | C | 0.01264855 | ORF1ab | p.Ala4262Pro |
| 13051 | C | A | 0.0130463 | ORF1ab | p.Ala4262Ala |
| 13350 | G | C | 0.01117735 | ORF1ab | p.Gly4362Ala |
| 14408 | C | T | 0.999626 | ORF1ab | p.Pro4715Leu |
| 15451 | G | A | 0.999237 | ORF1ab | p.Gly5063Ser |

| Position (NC_045512.2) | Ref | Alt | Proportion | Gene | HGVSp |
|---|---|---|---|---|---|
| 16466 | C | T | 0.999622 | ORF1ab | p.Pro5401Leu |
| 17474 | C | T | 0.0121133 | ORF1ab | p.Thr5737Ile |
| 19220 | C | T | 0.99955 | ORF1ab | p.Ala6319Val |
| 20887 | G | A | 0.9991405 | ORF1ab | p.Gly6875Arg |
| 21618 | C | G | 1 | | p.Thr19Arg |
| 21846 | C | T | 1 | | p.Thr95Ile |
| 21987 | G | A | 0.99845 | S | p.Gly142Asp |
| 22028 | GAGTTCA | G | 0.993089 | S | p.Glu156_Arg158delinsGly |
| 22295 | C | T | 0.0166003 | S | p.His245Tyr |
| 22335 | G | T | 0.999783 | S | p.Trp258Leu |
| 22813 | G | T | 0.999539 | S | p.Lys417Asn |
| 22917 | T | G | 0.999394 | S | p.Leu452Arg |
| 22995 | C | A | 0.999604 | S | p.Thr478Lys |
| 23403 | A | G | 0.9994815 | S | p.Asp614Gly |
| 23416 | A | G | 0.0184667 | S | p.Thr618Thr |
| 23525 | C | T | 0.0182282 | S | p.His655Tyr |
| 23590 | TCAGACTAATTCTCCTCGG | T | 0.2970605 | S | p.Gln677_Arg682del |
| 23604 | C | G | 0.81803 | S | p.Pro681Arg |
| 23608 | G | T | 0.02919235 | S | p.Arg682Arg |
| 24410 | G | A | 0.9988615 | S | p.Asp950Asn |
| 25469 | C | T | 0.9995855 | ORF3a | p.Ser26Leu |
| 26767 | T | C | 0.9995955 | M | p.Ile82Thr |
| 27638 | T | C | 0.9993685 | ORF7a | p.Val82Ala |
| 27752 | C | T | 0.9995265 | ORF7a | p.Thr120Ile |
| 27874 | C | T | 0.999117 | ORF7b | p.Thr40Ile |
| 28247 | AGATTTC | A | 0.9659085 | ORF8 | p.Asp119_Phe120del |
| 28270 | TA | T | 0.9662905 | ORF8-N | N/A |
| 28461 | A | G | 0.999469 | N | p.Asp63Gly |
| 28657 | C | T | 0.01113015 | N | p.Asp128Asp |
| 28881 | G | T | 0.9992455 | N | p.Arg203Met |
| 28916 | G | T | 0.99845 | N | p.Gly215Cys |
| 29402 | G | T | 0.999269 | N | p.Asp377Tyr |
| 29742 | G | T | 0.998876 | ORF10-CHR_END | N/A |

APPLICATIONS

Infectivity assay, viral growth, neutralisation assay.

DEPOSITOR

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

ACKNOWLEDGMENTS

Acknowledgment for publications should read "The following reagent was obtained from the Centre For AIDS Reagents, NIBSC, UK: Delta (AY.1 sub-lineage) (#101033), thanks to the contribution of Dr Kevin Bewley".

## MATERIAL SAFETY SHEET

| Physical properties (at room temperature) | | | |
|---|---|---|---|
| Physical appearance | Yellow/Pink, liquid | | |
| Fire hazard | None | | |
| **Chemical properties** | | | |
| Stable | Yes | Corrosive: | No |
| Hygroscopic | No | Oxidising: | No |
| Flammable | No | Irritant: | No |
| Other: Live SARS-CoV-2.<br>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:<br>CAUTION - This preparation is not for administration to humans or animals in the human food chain. This preparation is 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 clothing, gloves and use within ACDP3 or higher facility. | | | |
| **Toxicological properties** | | | |
| Effects of inhalation: | Likelihood of Coronavirus infection | | |
| Effects of ingestion: | Likelihood of Coronavirus infection | | |
| 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 contents should be taken up with absorbent material wetted with an appropriate virucidal agent. Rinse area with an appropriate virucidal agent followed by water.<br><br>Absorbent materials used to treat spillage should be treated as biologically hazardous waste. | | | |