

| Sample ID                                 | Proctor PCR Results | DNA concentration (ng/µL) | DNA-seq Results        | nt RM (sp) | Stanford PCR Results   |
|---|---------------------|---------------------------|------------------------|------------|------------------------|
| <b>Positive Reference PCR Samples</b>     |                     |                           |                        |            |                        |
| 22  | CMV                 | 0.102                     | CMV                    | 4.362      | NA                     |
| 28  | CMV                 | <0.05                     | CMV                    | 537.635    | NA                     |
| 34  | CMV                 | 0.108                     | CMV                    | 713.308    | NA                     |
| 40  | CMV                 | <0.05                     | CMV                    | 21.663     | NA                     |
| 62  | CMV                 | 0.176                     | CMV                    | 16.184     | NA                     |
| 65  | CMV                 | <0.05                     | CMV                    | 286.589    | NA                     |
| 71  | CMV                 | 2.66                      | CMV                    | 727.388    | NA                     |
| 74  | CMV                 | 0.134                     | CMV                    | 982.894    | NA                     |
| 42  | HSV-1               | 1.06                      | HSV-1                  | 10.443     | NA                     |
| 17  | HSV-2               | 0.956                     | HSV-2                  | 3.751      | NA                     |
| 23  | HSV-2               | 0.682                     | HSV-2                  | 100.162    | NA                     |
| 36  | HSV-2               | 0.164                     | HSV-2                  | 40.482     | NA                     |
| 38  | HSV-2               | 0.100                     | HSV-2                  | 0.427      | NA                     |
| 47  | HSV-2               | 2.32                      | HSV-2                  | 49.161     | NA                     |
| 64  | HSV-2               | <0.05                     | HSV-2                  | 0.109      | NA                     |
| 15  | <i>T. gondii</i>    | 1.90                      | <i>T. gondii</i>       | 34.936     | NA                     |
| 25*                                       | <i>T. gondii</i>    | 0.140                     | Negative               | NA         | <i>T. gondii</i>       |
| 30  | <i>T. gondii</i>    | <0.05                     | <i>T. gondii</i>       | 49.609     | NA                     |
| 41  | <i>T. gondii</i>    | 0.134                     | <i>T. gondii</i>       | 0.171      | NA                     |
| 50  | <i>T. gondii</i>    | <0.05                     | <i>T. gondii</i>       | 0.653      | NA                     |
| 54*                                       | <i>T. gondii</i>    | 1.24                      | Negative               | NA         | <i>T. gondii</i>       |
| 57  | <i>T. gondii</i>    | 0.180                     | <i>T. gondii</i>       | 256.063    | NA                     |
| 60*                                       | <i>T. gondii</i>    | 0.178                     | Negative               | NA         | <i>T. gondii</i>       |
| 14  | VZV                 | 0.538                     | VZV                    | 0.41       | NA                     |
| 27  | VZV                 | <0.05                     | VZV                    | 19.32      | NA                     |
| 29  | VZV                 | 4.16                      | VZV                    | 8.395      | NA                     |
| 32  | VZV                 | 0.160                     | VZV                    | 125.516    | NA                     |
| 43  | VZV                 | 3.92                      | VZV                    | 2.585      | NA                     |
| 44*                                       | VZV                 | 0.126                     | Negative               | NA         | VZV                    |
| 48  | VZV                 | 1.01                      | VZV                    | 1.214      | NA                     |
| 66  | VZV                 | 0.128                     | VZV                    | 1.181      | NA                     |
| <b>Pan-Negative Reference PCR Samples</b> |                     |                           |                        |            |                        |
| 4   | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 5   | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 11  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 12  | Pan-Negative        | 5.06                      | Negative               | NA         | NA                     |
| 13  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 16  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 18*                                       | Pan-Negative        | <0.05                     | <i>C. dubliniensis</i> | 33.99      | <i>C. dubliniensis</i> |
| 21  | Pan-Negative        | 0.170                     | Negative               | NA         | NA                     |
| 24  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 26  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 31  | Pan-Negative        | 0.378                     | Negative               | NA         | NA                     |
| 33  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 35  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 37  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 39*                                       | Pan-Negative        | <0.05                     | HSV-2                  | 0.064      | NDT                    |
| 45  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 46  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 49  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 51  | Pan-Negative        | 0.692                     | Negative               | NA         | NA                     |
| 52  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 53*                                       | Pan-Negative        | <0.05                     | CMV                    | 0.045      | NDT                    |
| 55*                                       | Pan-Negative        | <0.05                     | CMV                    | 1123.4     | CMV                    |
| 56  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 58  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 59  | Pan-Negative        | 0.388                     | Negative               | NA         | NA                     |
| 61  | Pan-Negative        | 0.180                     | Negative               | NA         | NA                     |
| 63*                                       | Pan-Negative        | <0.05                     | HTLV-1                 | 0.111      | HTLV-1                 |
| 67  | Pan-Negative        | 0.326                     | Negative               | NA         | NA                     |
| 68*                                       | Pan-Negative        | <0.05                     | HHV-6                  | 2.79       | HHV-6                  |
| 69  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 70*                                       | Pan-Negative        | 0.554                     | HHV-6                  | 2.583      | HHV-6                  |
| 72  | Pan-Negative        | 0.126                     | Negative               | NA         | NA                     |
| 73  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 75*                                       | Pan-Negative        | 1.43                      | <i>K. pneumoniae</i>   | 9446.854   | <i>K. pneumoniae</i>   |
| 76  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |
| 77  | Pan-Negative        | <0.05                     | Negative               | NA         | NA                     |

**Table S1: Result Summary for Positive and Pan-negative Reference PCR Samples.** (\*) Indicates discrepant samples. Abbreviations: matched read pairs per million read pairs (RM) at the species level

based on nucleotide (nt) alignment, nt RM (sp); not applicable, NA; not detected, NDET; *Toxoplasma gondii*, *T. gondii*; *Candida dubliniensis*, *C. dubliniensis*; *Klebsiella pneumoniae*, *K. pneumoniae*.