**Table S1** Optimization of volumes of primers and probes

|  |  |  |  |
| --- | --- | --- | --- |
| Template concentration  (copies/μL) | primer 0.2 μL+probe 0.1 μL  +AT 60 ℃ | primer 0.4 μL+probe 0.2 μL  +AT 60 ℃ | primer 0.8 μL+probe 0.4 μL  +AT 60 ℃ |
| 7.30×105 | 19.86 | 19.72 | 19.83 |
| 7.30×104 | 23.77 | 23.07 | 23.32 |
| 7.30×103 | 27.34 | 26.89 | 26.89 |
| 7.30×102 | 30.32 | 29.92 | 30.34 |
| 7.30×101 | 33.65 | 33.03 | 33.52 |
| 7.30×100 | NA | 36.75 | 36.78 |
| Negative control | NA | NA | NA |

**Table S2** Optimization of AT

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Template concentration  (copies/μL) | primer 0.4 μL+probe 0.2 μL+AT 55℃ | primer 0.4 μL+probe 0.2 μL+AT 57 ℃ | primer 0.4 μL+probe 0.2 μL+AT 59 ℃ | primer 0.4 μL+probe 0.2 μL+AT 60 ℃ | primer 0.4 μL+probe 0.2 μL+AT 61 ℃ |
| 7.30×105 | 20.55 | 20.46 | 19.90 | 19.81 | 19.97 |
| 7.30×104 | 23.58 | 23.18 | 22.91 | 23.19 | 23.51 |
| 7.30×103 | 27.01 | 26.93 | 26.95 | 26.79 | 26.90 |
| 7.30×102 | 30.16 | 29.98 | 29.79 | 30.02 | 29.91 |
| 7.30×101 | 33.35 | 33.24 | 33.17 | 33.07 | 33.16 |
| 7.30×100 | NA | NA | 36.80 | 36.62 | 37.03 |
| Negative control | NA | NA | NA | NA | NA |

**Table S3** The detection results of nine clionical samples using the developed TaqMan-qPCR assay and the commercial qPCR detection kit

|  |  |  |
| --- | --- | --- |
| Sample | Commercial qPCR Detection Kit | Deveoped TaqMan-qPCR |
| 1 | 30.29 | 28.72 |
| 2 | 30.73 | 29.54 |
| 3 | 28.9 | 28.23 |
| 4 | 28.43 | 27.32 |
| 5 | 30.3 | 29.46 |
| 6 | 33.67 | 32.5 |
| 7 | 36.95 | 35.56 |
| 8 | 38.38 | 37.2 |
| 9 | NA | NA |
| Negative control | NA | NA |