

# A Simple Visual Detection Method of Human Zika Virus Using Reverse Transcription Loop Mediated Isothermal Amplification

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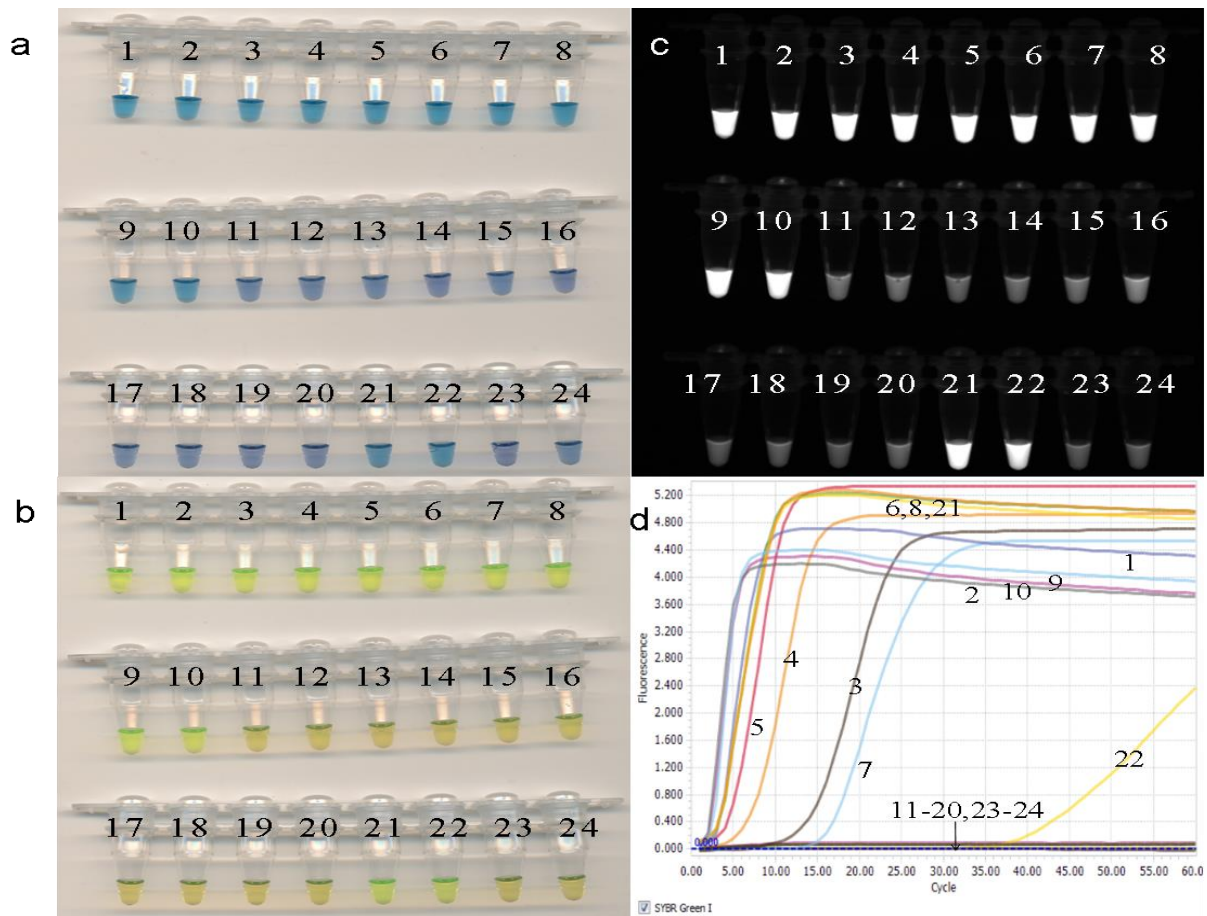
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| <b>ZIKV standard (copies/25 µl reaction)</b> | <b>Numbers of positive/total tested</b> | <b>Positive percentage (%)</b> | <b>Ct value range (min)</b> |
|--|---|--------------------------------|-----------------------------|
| 100  | 10/10                                   | 100%                           | 9.97-11.87                  |
| 50   | 08/10                                   | 80%                            | 12.55-23.09                 |
| 10   | 05/10                                   | 50%                            | 13.71-18.69                 |
| 5  | 02/10                                   | 20%                            | 17.82-18.25                 |

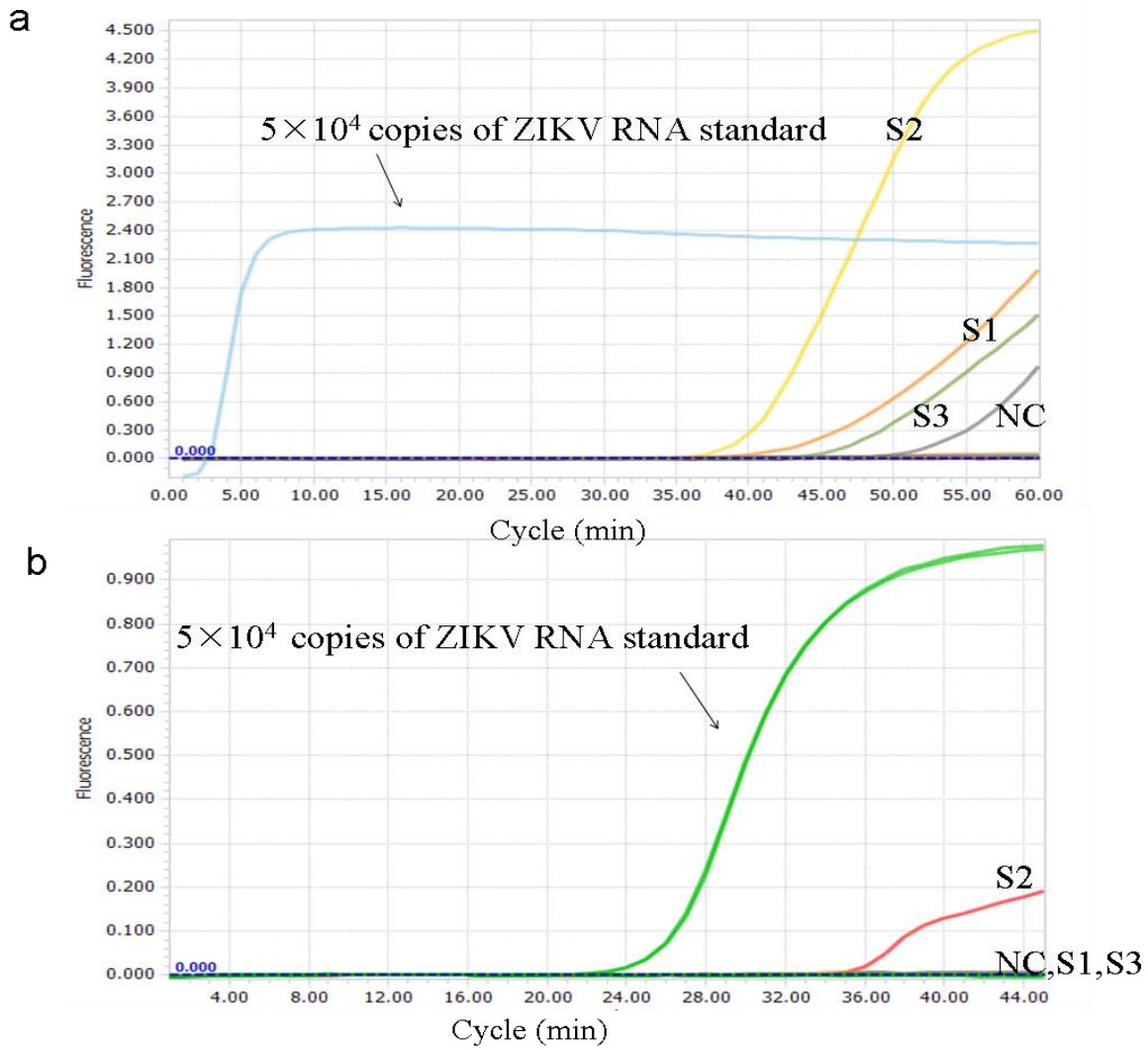
**Table S1:** Limit of detection of the ZIKV RT-LAMP assay.

| Samples number | ZIKV copies by RT-qPCR (per 25 $\mu$ l reaction) | RT-LAMP result |
|----------------|--|----------------|
| S1             | 56040  | +              |
| S2             | 511200   | +              |
| S3             | 2055   | +              |
| S4             | 3096   | +              |
| S5             | 4470   | +              |
| S6             | 11440  | +              |
| S7             | 1735   | +              |
| S8             | 6454   | +              |
| S9             | 65920  | +              |
| S10            | 254000   | +              |
| S11-S20        | 0  | -              |

**Table S2:** Comparison between the ZIKV RT-LAMP and RT-qPCR using 20 culture supernatants. +- positive; - -negative.



**Figure S1:** The evaluation of the ZIKV RT-LAMP assay using 20 cell culture supernatants. (a) HNB-based RT-LAMP assay; (b) Calcein-based RT-LAMP assay under daylight. (c) Calcein-based RT-LAMP assay under UV light. (d) SYTO 9-based RT-LAMP assay. Tubes (or amplification curves) 1-20 represent 20 cell culture supernatants. Tubes (or amplification curves) 21 and 22 represent  $5 \times 10^3$  and  $5 \times 10^1$  copies of ZIKV RNA standard per reaction, respectively. Tubes (or amplification curves) 23 and 24 represent negative controls.



**Figure S2:** Comparison between the ZIKV RT-LAMP (a) and RT-qPCR (b) assays using three urine samples (S1, S2 and S3). NC: negative control.