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APPENDICES

Appendix 1. *Calculation for Rinse Sampling Method*

I. Determination of Detected Concentration

Since 25 ng/mL standard curve solution is diluted with 0.1% Triton X-100 solution at a 1:1 ratio, the concentration of RNA that will be detected is:

$$n = \frac{12{,}5\ ng/mL}{2}$$
$$n = 6{,}25\ ng/mL$$

Appendix 2. *Calculation for Swab Sampling Method*

I. Determination of Sample Amount

The sample concentration made for the swab sampling method is 10 µg/mL. The amount of sample needed to obtain a concentration of MACO value is done with the following equation:

$$n = \frac{m}{V}$$

Where *n* is the concentration (ng/mL); *m* is mass (µg or ng); and *V* is volume (mL). Rearranging the equation gives:

$$V = \frac{m}{n}$$

To calculate the required amount of 10 µg/mL sample, *m* shall be substituted with the MACO value of the swab sampling method and *n* shall be substituted with the concentration of the sample solution as shown:

$$V = \frac{304\ ng}{10\ ug/mL}$$
$$V = \frac{304\ ng}{10{,}000\ ng/mL}$$
$$V = 0{,}0304\ mL$$
$$V = 30{,}4\ uL$$

II. Determination of Detected Concentration

Since 30,4 µL of 10 µg/mL sample is tested onto the swabs, the concentration of RNA in the 10 mL Triton X-100 solution shall:

$$n = \frac{m}{V}$$
$$n = \frac{304\ ng}{10\ mL}$$
$$n = 30{,}4\ ng/mL$$

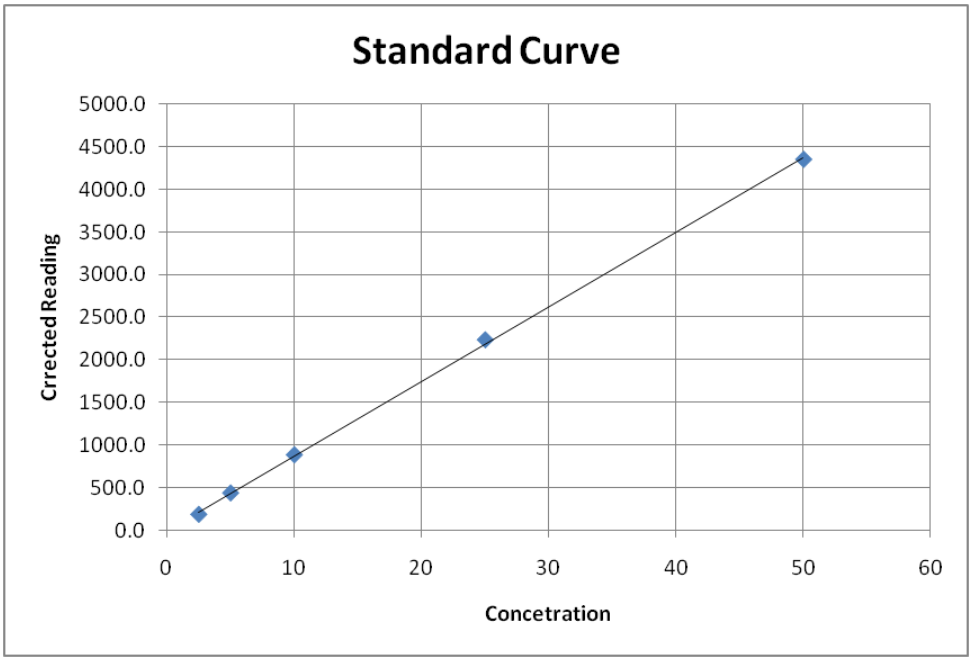
Taking into consideration of the Quant-iT addition on the microplate, the concentration that will be detected is:

$$n = \frac{30{,}4\ ng/mL}{2}$$
$$n = 15{,}2\ ng/mL$$

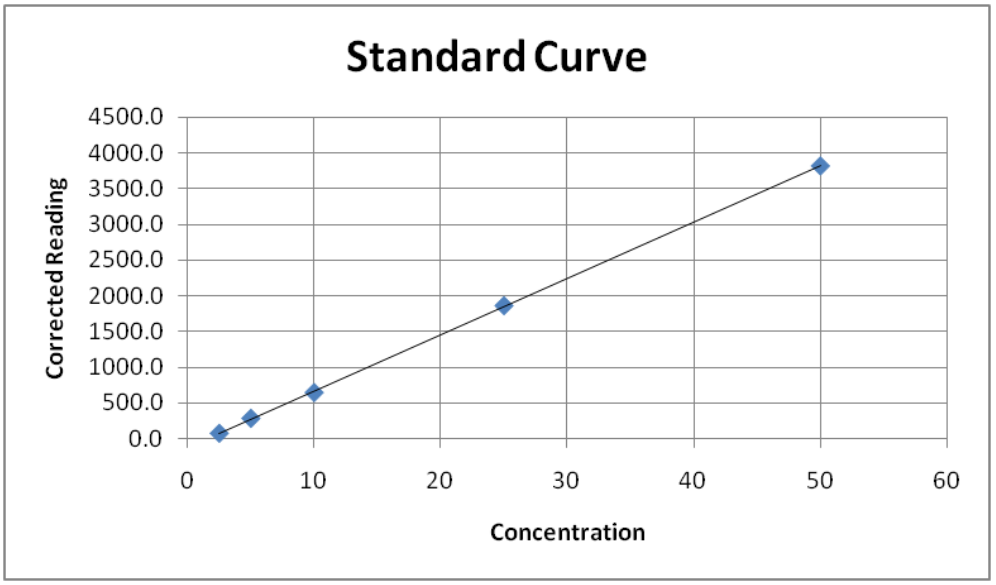
Appendix 3. *Calculation for Percentage (%) CV*

To determine the Percentage (%) CV of the obtained results, the following formula can be used:

$$CV\ (\%) = \left(\frac{Standard\ deviation}{Mean}\right) \times 100$$



Appendix 4. *Standard Curve 1 for Rinse and Swab Sampling Methods (Determination of Swab Sampling Material)*

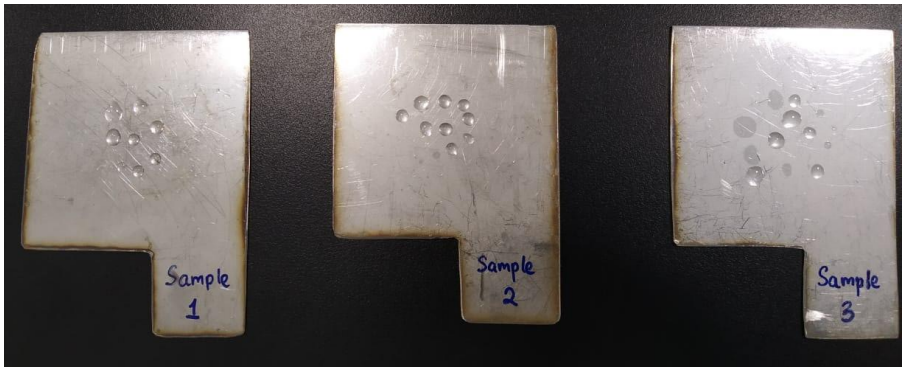


Appendix 5. *Standard Curve 2 for Swab Sampling Methods (Detection of mRNA Residue with Swab Sampling Method)*

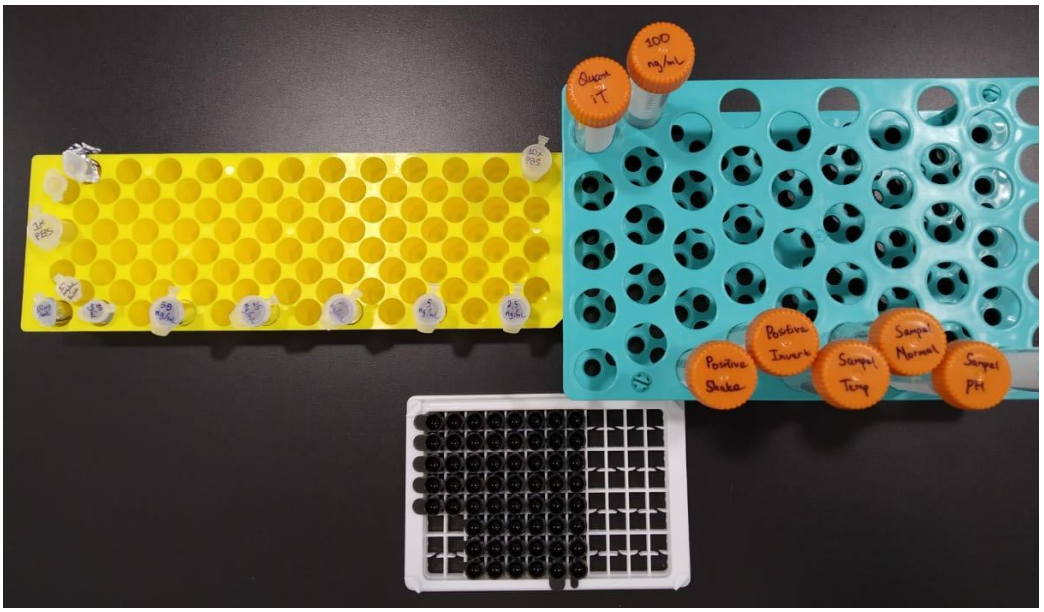
Appendix 6. *List of the Standard Equation and R^2 values of the Standard Curves*

Standard Curve No.	**Standard Equations**	**R^2**
1.	y = 87,59x - 5,239	0,999
2.	y = 78,98x - 124,4	0,999

DOCUMENTATION



Documentation 1. *Samples on plate for the swab sampling method*



Documentation 2. *Preparations for the rinse and swab sampling method*

Documentation 3. *Bio-Tek FLX800T Microplate Fluorescence Reader*