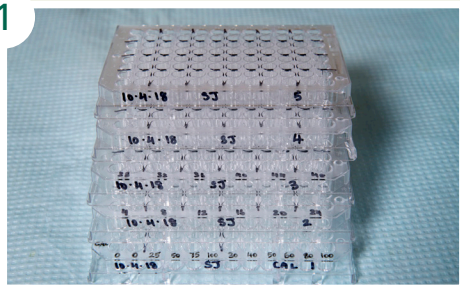


1



Label each plate on the front with the date and analyst initial. Write the plate number on the upper left corner and on the front.

2

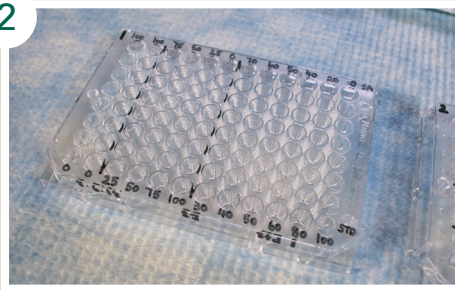


Plate #1 is used for the calibrator with 8 replicates/concentration. Write the volumes of sodium ascorbate (SA) at the top of each column and the volumes of calibrator (CAL) at the bottom of each column.

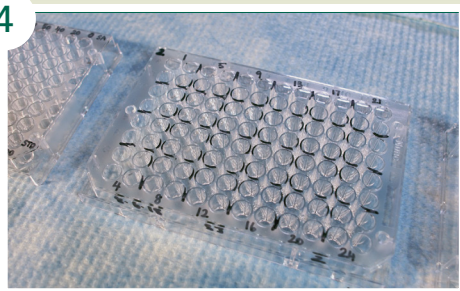
3

Each sample plate contains the following

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|----|---|----|---|-----|---|-----|---|-----|----|-------|
| A | | QC | | #4 | | #8 | | #12 | | #16 | | #20 |
| B | | | | | | | | | | | | |
| C | | #1 | | #5 | | #9 | | #13 | | #17 | | #21 |
| D | | | | | | | | | | | | |
| E | | #2 | | #6 | | #10 | | #14 | | #18 | | #22 |
| F | | | | | | | | | | | | |
| G | | #3 | | #7 | | #11 | | #15 | | #19 | | Blank |
| H | | | | | | | | | | | | |

Plates #2-4 are sample plates. Each sample is analyzed using 4 replicates (2 dilutions and 2 replicates per dilution). A total of 24 samples can be analyzed per sample plate including 1 QC sample and 1 blank.

4



To help with the correct transfer of diluted samples into the plate, divide the plate into columns and rows. Each sample will occupy four wells. Label the sample # on the plate.

5



Add 200 μ L growth medium to all plates using a 12-channel electronic pipette (50–1,250 μ L) with the repetitive pipetting function and volume set to 200 μ L.

6

Calibrator plate
Add sodium ascorbate

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|-----|-----|----|----|----|---|----|----|----|----|----|----|
| A | 100 | 100 | 75 | 50 | 25 | 0 | 70 | 60 | 50 | 40 | 20 | 0 |
| B | 100 | 100 | 75 | 50 | 25 | 0 | 70 | 60 | 50 | 40 | 20 | 0 |
| C | 100 | 100 | 75 | 50 | 25 | 0 | 70 | 60 | 50 | 40 | 20 | 0 |
| D | 100 | 100 | 75 | 50 | 25 | 0 | 70 | 60 | 50 | 40 | 20 | 0 |
| E | 100 | 100 | 75 | 50 | 25 | 0 | 70 | 60 | 50 | 40 | 20 | 0 |
| F | 100 | 100 | 75 | 50 | 25 | 0 | 70 | 60 | 50 | 40 | 20 | 0 |
| G | 100 | 100 | 75 | 50 | 25 | 0 | 70 | 60 | 50 | 40 | 20 | 0 |
| H | 100 | 100 | 75 | 50 | 25 | 0 | 70 | 60 | 50 | 40 | 20 | 0 |

Volume of 0.5% sodium ascorbate solution (μ L)

Add 0.5% sodium ascorbate to the calibrator plate (#1) using a smaller 12-channel electronic pipette (20–300 μ L) with the single pipetting function and 8 tips. Transfer appropriate volumes as shown above.

7

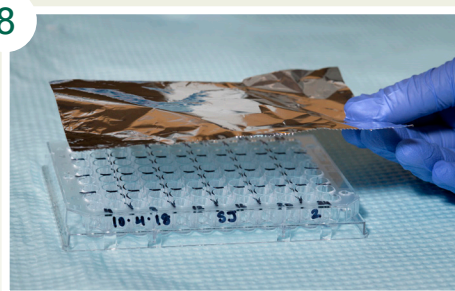
Sample plate
Add sodium ascorbate

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|----|---|----|---|----|---|----|---|----|----|----|----|
| A | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 |
| B | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 |
| C | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 |
| D | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 |
| E | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 |
| F | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 |
| G | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 |
| H | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 | 50 | 0 |

Volume of 0.5% sodium ascorbate solution (μ L)

Add 50 μ L of 0.5% sodium ascorbate into sample plates using the same 12-channel electronic pipette with the repetitive pipetting function and 8 tips. Only add solution to odd-number columns.

8



Cover all plates with foil to protect them from dust and light.



Centers for Disease Control and Prevention
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www.cdc.gov/nceh/dls/nbb.html