

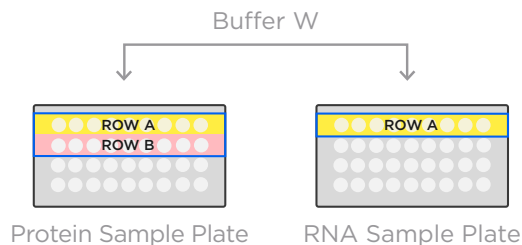
## Quick Start Guide

# nCounter<sup>®</sup> Vantage 3D<sup>™</sup> RNA:Protein Immune Cell Profiling Panel for Cell Suspensions

with Universal Cell Capture Kit  
Cell Surface Compatible

This quick start guide provides an overview of the RNA:Protein protocol described in MAN-10031. If you are a first-time user, please read the full protocol and use this as a reference in subsequent experiments. Contact NanoString Support (support@nanosttring.com) to receive additional assistance with this assay.

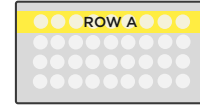
### 1 Pre-block Protein & RNA Sample Plates (Section A)



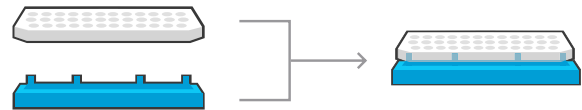
### 2

### Bind Cells to Universal Cell Capture Beads (Sections B and C)

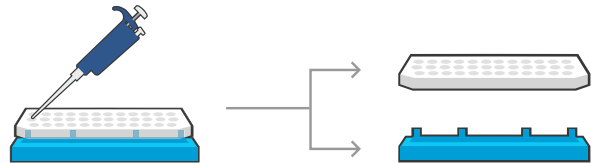
1. Collect a minimum of 20,000 cells (50,000 from primary cell samples)
2. Discard Buffer W from Protein Sample Plate
3. Add 200  $\mu$ l of prepared cell solution to each well of Row A on Protein Sample Plate
4. Add 9  $\mu$ l of Universal Cell Capture Beads to each well of Row A on Protein Sample Plate
5. Incubate plate for **30 minutes** at **4°C**



6. Place plate on magnetic separator
7. Leave plate on magnet for **5 minutes**



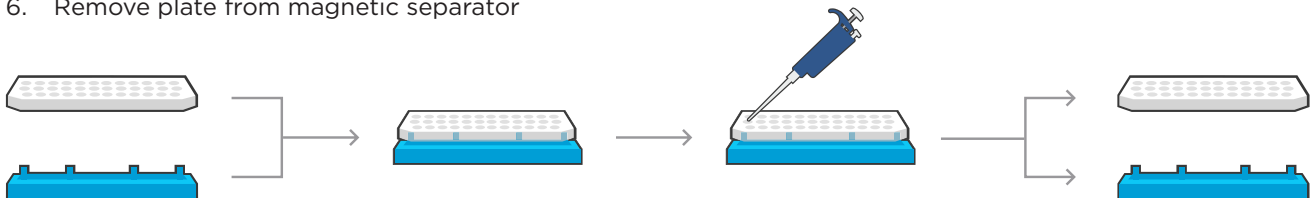
8. Remove supernatant, keeping the plate in contact with magnetic separator
9. Remove plate from magnetic separator



10. If necessary, resuspend beads in Fc receptor blocking solution, incubate for **10 minutes**
11. Add Buffer W to bring final volume to 200  $\mu$ l

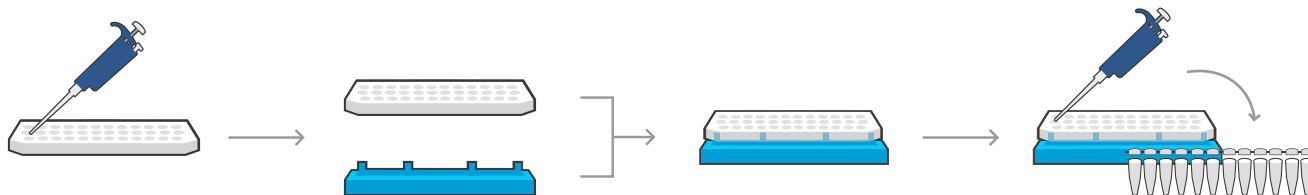
### 3 Prepare RNA Lysate (Section D)

1. Discard Buffer W from the RNA Sample Plate
2. Transfer 130  $\mu$ l of each sample from the Protein Sample Plate to the corresponding well on the RNA Sample Plate
3. Place plate on magnetic separator
4. Leave plate on magnet for **5 minutes**
5. Remove supernatant, keeping the plate in contact with magnetic separator
6. Remove plate from magnetic separator



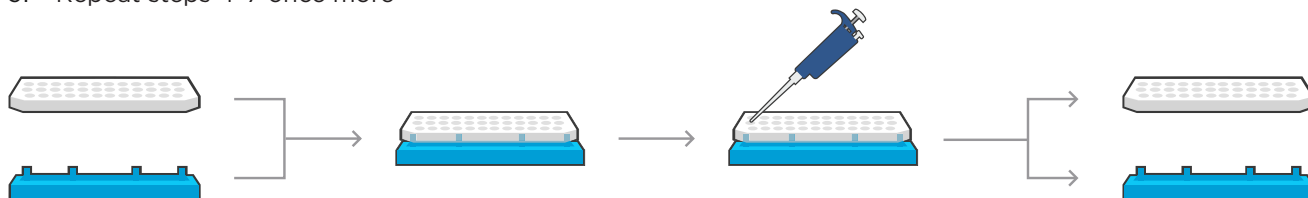
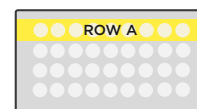
### 3 Prepare RNA Lysate (Section D), cont'd.

7. Resuspend beads in LH Buffer and pipette thoroughly to lyse cells on beads, incubate for **2-3 minutes**
8. Place plate on magnetic separator
9. Leave plate on magnet for **5 minutes**
10. Collect lysate, keeping the plate in contact with magnetic separator
11. Transfer lysate to a 12-well strip tube

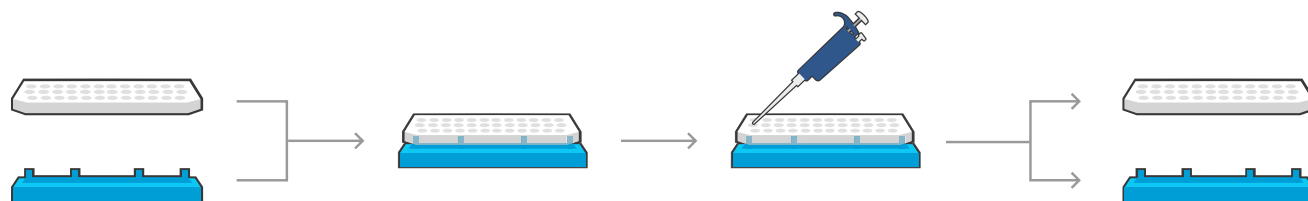
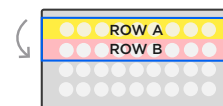


### 4 Prepare Protein Sample (Section E)

1. Add 130  $\mu\text{l}$  of Buffer W to Row A of Protein Sample Plate
2. Add 10  $\mu\text{l}$  of Ab Mix to Row A of Protein Sample Plate
3. Incubate for **30 minutes** at **4°C**
4. Place plate on magnetic separator
5. Leave plate on magnet for **5 minutes**
6. Remove supernatant, keeping the plate in contact with magnetic separator
7. Remove plate from magnetic separator
8. Gently resuspend beads in 200  $\mu\text{l}$  Buffer W
9. Repeat steps 4-7 once more

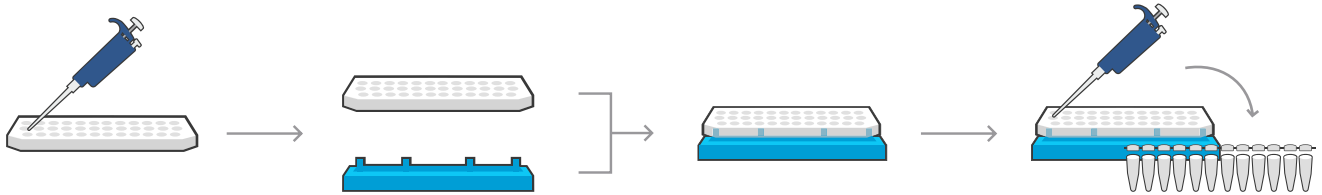


10. Gently resuspend beads in 200  $\mu\text{l}$  Buffer W and transfer the samples from Row A to Row B of the Protein Sample Plate  
(Note that no additional transfers are made in subsequent washes)
11. Place plate on magnetic separator
12. Leave plate on magnet for **5 minutes**
13. Remove supernatant, keeping the plate in contact with magnetic separator
14. Remove plate from magnetic separator
15. Gently resuspend beads in 200  $\mu\text{l}$  Buffer W
16. Repeat steps 11-14 once more



## Prepare Protein Lysate (Section E)

1. Resuspend beads in LH Buffer and pipette thoroughly to lyse cells on beads, incubate for **2-3 minutes**
2. Place plate on magnetic separator
3. Leave plate on magnet for **5 minutes**
4. Collect lysate, keeping the plate in contact with magnetic separator
5. Transfer lysate to a 12-well strip tube



6. Denature protein lysates
7. Refer to MAN-10031 for RNA:Protein hybridization protocol

### CONTACT US

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