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CDx autoXpress detection of COVID 19

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[1]Crystal Diagnostics

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ABSTRACT

The Crystal Diagnostics AutoXpress provides rapid detection of COVID 19 at 10 - 100 CFU per ul of clinical sample (nasal swab, sputum, or saliva). The patented Liquid Crystal technology is combined with antibody-coated paramagnetic microspheres to selectively capture and detect COVID 19.

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1 Transfer **600 µl** of test sample to 96 well plate. Each sample will be transferred to two wells, one for POS and one for NEG.

2 Mix the magnetic 3um microspheres for POS and NEG using a pipette.

3 Dispense **100 µl** of the magnetic 3um microspheres to each well.

4 Shake the plate at **1200 rpm, Room temperature , 00:00:10** , followed by **500 rpm, Room temperature , 00:15:00** .

5 Transfer the plate to the magnet block and wait for **00:05:00**

6 Aspirate all the liquid from each well without disturbing the pellet.

7 Add **900 µl** of PBS to each well and wait for **00:03:00**

8 Aspirate all the liquid from each well without disturbing the pellet.

9 Transfer plate to shaker from the magnet block and shake the plate at **1000 rpm, Room temperature , 00:00:10**

10 Mix the 10um poly microspheres using a pipette.

11 Dispense **100 µl** of the 10um poly microspheres to each well.

12 Shake the plate at **900 rpm, Room temperature , 00:00:30** , followed by **500 rpm, Room temperature , 00:15:00**

13 Transfer the plate to magnet block and wait for **00:05:00**

14 Aspirate all the liquid from each well without disturbing the pellet.

15 Dispense **300 µl** of PBS to each well and wait for **00:03:00**

16 Aspirate all the liquid from each well without disturbing the pellet.

17 Dispense **300 µl** of PBS to each well and wait for **00:03:00**

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18 Aspirate **280 µl** of liquid from each well without disturbing the pellet.

19 Transfer plate to shaker from the magnet block and shake the plate at **1200 rpm, Room temperature , 00:01:00**

20 Transfer the plate from shaker to Reader side

21 Mix the sample using a pipette. Transfer **10 µl** of the sample to **60 µl** of liquid crystal.

22 Gently mix the sample with liquid crystal and transfer the mix to BioSlide.

23 To disperse the liquid crystal, apply positive pressure to the BioSlide.

24 After **00:15:00** , BioSlide is read using the camera reader. The image and event count is obtained for each sample.

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