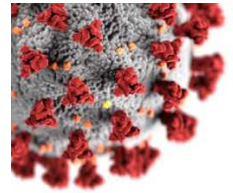


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CDx autoXpress detection of COVID 19

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Coronavirus Method De...

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Protocol status: In development

We are still developing and optimizing this protocol

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Keywords: rapid detection of covid, crystal diagnostics autoxpress, covid, nasal swab, rapid detection, antibody, patented liquid crystal technology, clinical sample, coated paramagnetic microsphere

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.

Automated

- 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
- 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.