# BioCode® MDx-3000



Cost-effective, high throughput multiplex system based on the Breakthrough Barcoded Magnetic Bead Technology

The BioCode® MDx-3000\* is a high throughput, automated, digital, molecular, multiplex diagnostic system based on patented Barcoded Magnetic Bead (BMB)

Technology. The BioCode® MDx-3000 system provides solutions for a variety of infectious disease testing that is ideal for moderate to high volume testing laboratories.

### **SYSTEM HIGHLIGHTS:**

- Simple system design improves laboratory workflow
- Scalable throughput of up to 188 patient samples in an 8-hr shift
- Simultaneous testing of up to 3 different panels on a single run
- Data Masking option enables select target reporting based on clinician's order

### **SMART SYSTEM ARCHITECTURE:**

- User Defined Mode supports the use of Laboratory Developed Tests
- Automated Post-run decontamination to reduce potential contamination

### **AVAILABLE MENU:**

- 17-Plex Gastrointestinal Pathogen Panel\*\*
- 17-Plex Respiratory Pathogen Panel\*\*
- 4-Plex CoV-2 Flu Plus Assay (EUA)\*\*\*
- SARS-CoV-2 Assay\*\*\*

# WORKFLOW



Automated DNA/RNA extraction.



PCR setup.



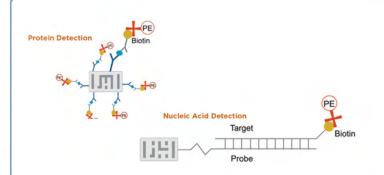
The MDx-3000 System automates the PCR amplification, hybridization/target capture and detection/result reporting process.





# **Barcoded Magnetic Bead Technology**

## **APPLICATION AND TECHNOLOGY**



- Barcodes identify specific target bound on the probes
- Digitally barcoded magnetic beads are highly stable and demonstrate minimal, non-specific binding characteristics

## SIZE AND SCALE



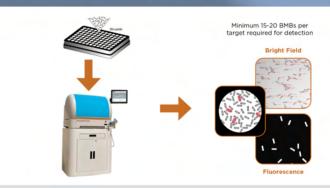
- Fabricated micro-scale digital barcodes
- 1000X smaller than commonly used barcodes: USPS, supermarkets
- Digitally barcoded magnetic beads are highly stable and demonstrate minimal, non-specific binding characteristics in biological assays

## COMPOSITION AND FABRICATION



• Magnetic property enables target capture and wash

### OPTICAL IMAGING AND DETECTION



- Bright field and fluorescence Images are overlaid for data compilation and output for each target
- Fluorescence signal above cutoff is indicative of presence of a target DNA/RNA in sample

**★** FDA Cleared, EU: **C** €

\*\*FDA 510(k)

\*\*\*This product has not been FDA cleared or approved; the assay has been authorized for emergency use by FDA under an Emergency Use Authorization (EUA) for use by CLIA certified laboratories.



