

ONSITE
GENE

myNAT™



THE FUTURE OF SAMPLE-TO-ANSWER PCR OPEN PANEL TESTING

- Automated and fast
- Compact and light weight
- Affordable to all
- 1-8 sample throughput
- Low cost iCard
- Many test kits optimized for sample-to-answer testing
- User to make *My Test* on a sealed reconfigurable cartridge
- Contamination control
- Room temperature reagent for shipping and storage
- Multiplex PCR panel (User Reconfigurable 1-16/20 plex)

Breakthrough Sample-to-Answer Open PCR Platform

The myNAT™ system by OnsiteGene Inc. is an innovative, all-in-one molecular diagnostics platform designed for fast, compact and high-sensitivity multiplex panel nucleic acid testing, with an open cartridge for users to make a test with their own reagents capable of 1-8 sample throughput. Combining automated magnetic bead extraction with multiplex real-time PCR panel in a sealed test cartridge, myNAT™ delivers results in just 35 minutes—from raw sample to actionable data of up to 16/20 targets. All its reagents and test cartridges can be shipped and stored at room temperature for 12 months, ideal for POCT.

With an ultra-low-cost sealed cartridge design to achieve user flexibility of 1 to 4 PCR tubes (1-16/20 targets, and expandable to 8 PCR tubes for 40 target multiplexing), myNAT™ brings laboratory-grade performance into compact, point-of-need settings at significantly lower cost, particularly suitable for cost-sensitive applications.

The outstanding performance and innovative design of the myNAT™ rapid nucleic acid panel testing system with a goal to reach sub-10-minute PCR test have been recognized and selected for the prestigious Advanced Diagnostic Technology (RADx) Program by the National Institutes of Health (NIH).

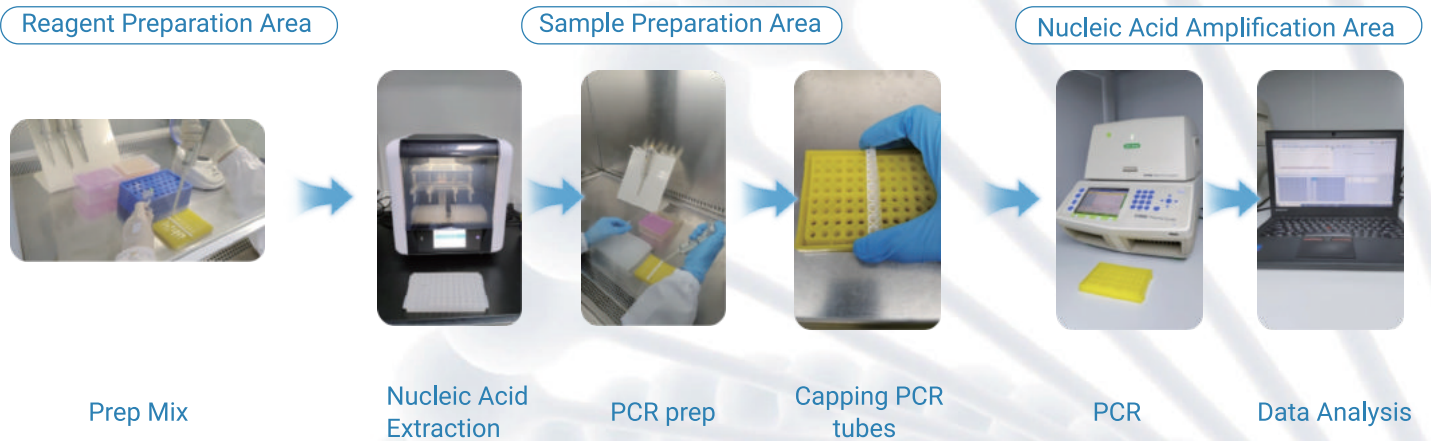


*myNAT-1
operating a sealed iCard
free of contamination*

Key Advantages

- | | |
|--|--|
| 01 Compact & Portable (1-8 samples)
Lightweight (7.6 kg), easy to deploy anywhere | 05 Scalable & Flexible
Supports random-access testing with multi-unit configurations (1 to 64 samples) |
| 02 Sample-to-Answer Automation free of contamination
Integrated magnetic bead extraction + real-time PCR panel + melt curve analysis on iCard with contamination control | 06 Room temperature shipping and storage of test kits and cartridges
Dried reagents are used in the test cartridges with shelf-life of 12 months at room temperature. |
| 03 Flexible multiplex PCR panel testing
1-16/20 plex selectable over 4 PCR tubes in a panel, expandable to 40 plex | 07 Compliant Manufacturing
Produced in ISO13485-audited facilities |
| 04 Cost-optimized Cartridge
The novel sealed cartridge design dramatically reduces per-test costs while ensuring effective aerosol contamination control and supporting high-volume production—making it ideal for cost-sensitive applications. | 08 Product Safety Certification
EN61010, EN61326 |
| | 09 Versatile Sample Compatibility
Swabs, saliva, sputum, blood, urine, feces, and tissue |

Conventional Extraction and PCR Workflow (Lab with Multiple Rooms)



myNAT™ Workflow (anywhere, anytime)



Cost Comparison per Test (Sample-to-Answer Workflow)



myNAT™ Product Models

Model	Description
myNAT-1	Single-sample system (up to 16 and optional 20 targets)
myNAT-8	8 samples, 4/5 targets per sample
Model-1G	Combines up to 16 myNAT-1 units for 16-sample random-access testing
Model-8G	Combines up to 8 myNAT-8 units for 64-sample random-access and parallel testing

Technical Specifications

Technology	Sample-to-answer ultra-low-cost cartridge-based rapid nucleic acid analyzer with integrated magnetic bead extraction and a qPCR panel of up to 16 and optional 20 targets, and capable of DNA melt curve analysis.
Sample Throughput	1 sample (myNAT-1), 8 sample (myNAT-8)
Cartridge format	Closed, preloaded with extraction/PCR reagents or user loaded
Sample-to-answer time	35 minutes
Sample volume	100uL–500uL
Panel Layout	4 PCR tubes (up to 16/20 targets), expandable to 40 targets, 10-50 µL reaction volume
Sensitivity (Resolution)	Target concentration changes as small as 2-fold differences can be detected in single plex fluorescence reactions
Dynamic range	8-fold dilution gradient
Optical channels	Fam™, Hex™, Rox™, Cy5™. Option Cy5.5™
Sample type	Swabs, blood, sputum, feces, urine, tissue, etc.
Operation	Touch screen interface
Dimensions (WxHxL)/Weight	15 × 36 × 38 cm / 7.6 kg for myNAT-1 26 × 44 × 48 cm / 18 kg for myNAT-8
Power Rating	100V – 240V AC, 50/60Hz

Sample-to-answer Test Kits:

For our infectious disease PCR panel test kits with integrated nucleic acid extraction, please refer to our brochure of *Xfast™ & Efast™ Superfast Reagent*.



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