



PROMINEX

Company Overview

September 2020

Our Mission

Prominex is dedicated to the development of Molecular Point-of-Care for infectious diseases.

The growth drivers behind point-of-care testing include:

- Improved patient care in time-critical clinical situations
- Improved ABX prescribing & reduced antimicrobial resistance
- Potential for cost savings by optimizing patient management
- Acceleration of trend with the emergence of SARS-CoV-2



Executive Summary

Well positioned to deliver MDx POCT solutions for infectious diseases

- Prominex is developing a point-of-care molecular testing solution that delivers central lab precision results in under 5 minutes
- Our initial assay focus is on infectious diseases (SARS-CoV-2, SARS-CoV-2/Flu A/B/RSV, CT/NG, STI panel, GAS, MRSA, C. diff, ...)
- A broad IP portfolio protects our novel CHASE amplification chemistry and planar waveguide detection technologies
- Product design and development partnership in place for the instrument and assay cartridge with Invetech
- Clinical feasibility testing near completion for CT/NG assay
- Assay development focus on SARS-CoV-2 Assay(s) w/ plate assay in response to pandemic
- Total invested capital of \$19M from founding in Jan 2018





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Prominex System

Designed for Point-of-Care Testing

Prominex POC System

The first 5-minute MDx for Point-of-Care testing

- **Multiplex** – SARS-CoV-2, Flu A, Flu B and RSV from a single sample
- **Rapid** – Sample-to-result in less than 5 minutes
- **Accurate** – Delivers central lab precision results
- **Easy-to-use** – Single step workflow on crude clinical samples
- **CLIA Waiver** – Designed for point-of-care settings
- **Affordable** – Low-cost assay cartridge and instrument
- **Novel Technology** – High multiplex, quantitation, miRNA, ...

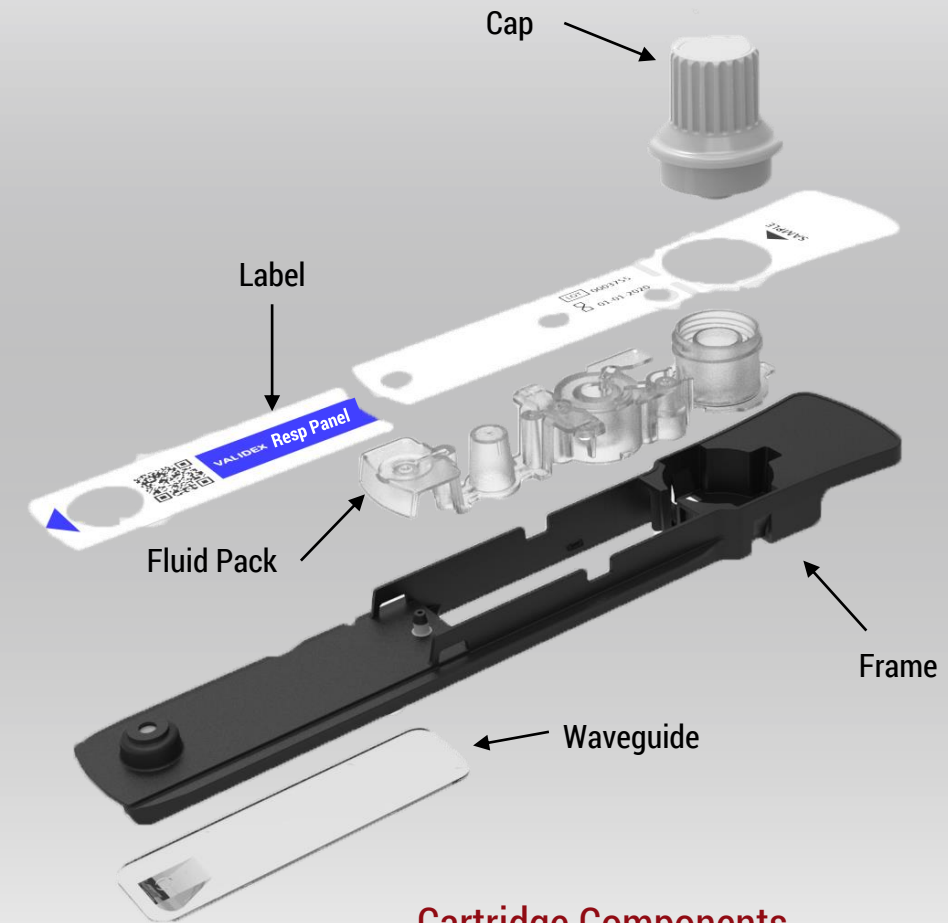


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Prominex Assay Cartridge

A look inside the design simplicity of the cartridge

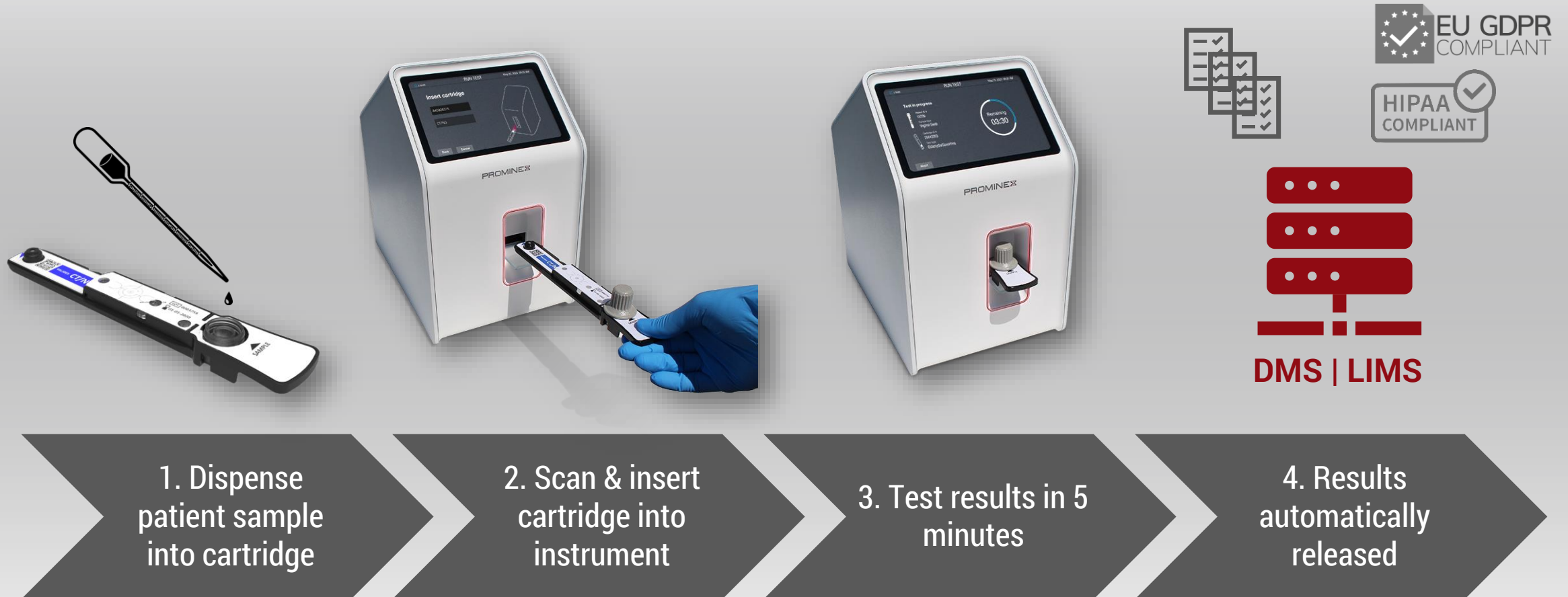
- **Simple Design** – Minimal components and assembly
- **Easy to Use** – Add sample, cap sample port, insert into instrument
- **Fully Integrated** – All-in-one from lysis to detection
- **Low Cost** – Inexpensive injection moldable plastics
- **Multiplex capable** – Single cartridge for multiple targets
- **Robust** – Stabilized reagents at room temperature
- **Single-Use**



Cartridge Components

Prominex POC System Workflow

Easy-to-use workflow that delivers rapid, accurate test results





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Prominex System

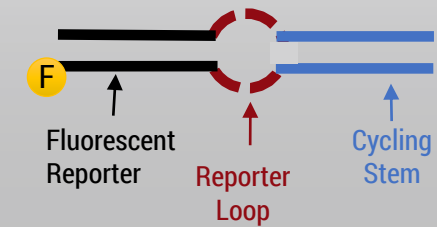
Chemistry and Detection Technologies

Prominex System

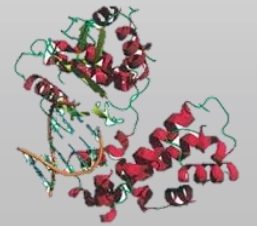
Two novel technologies enable the Prominex System

Molecular Amplification Chemistry

- A Coupled Hairpin Amplification System (CHASE) amplifies and releases target-specific fluorescent reporter probes



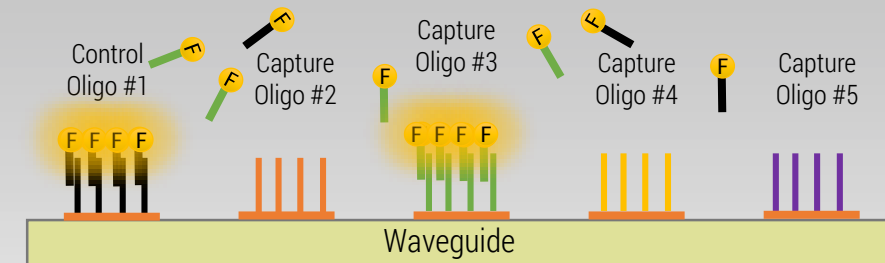
Reporter



DSN Enzyme

Planar Waveguide Detection System

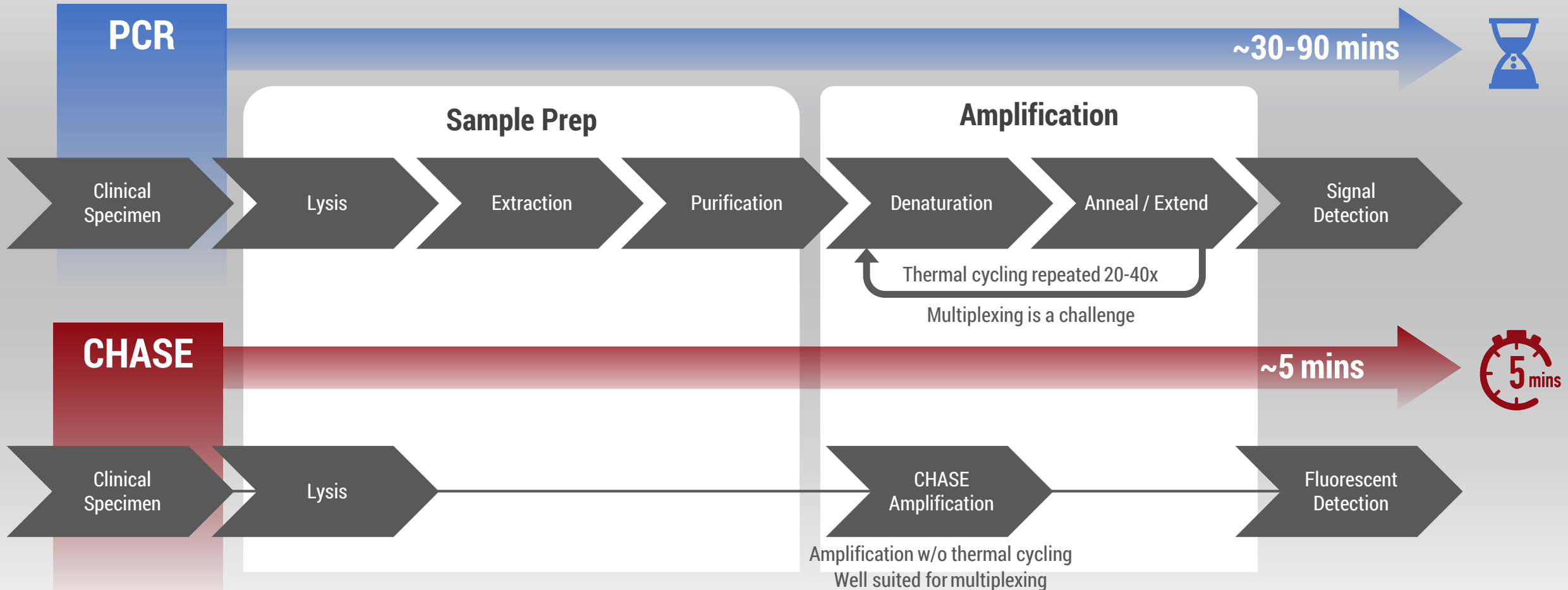
- The target-specific fluorescent reporter probes are spatially captured, excited and imaged on the surface of a planar waveguide



Planar Waveguide and Capture Probes

CHASE vs PCR for MDx

CHASE delivers significant time-to-results advantages vs. PCR

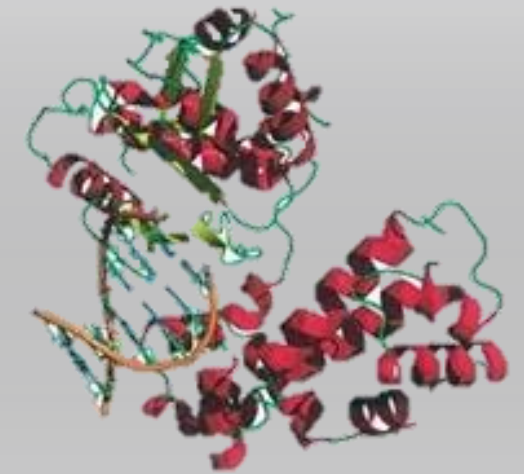


Duplex Specific Nuclease (DSN) Enzyme

The key to CHASE molecular amplification chemistry

DSN Enzyme Properties:

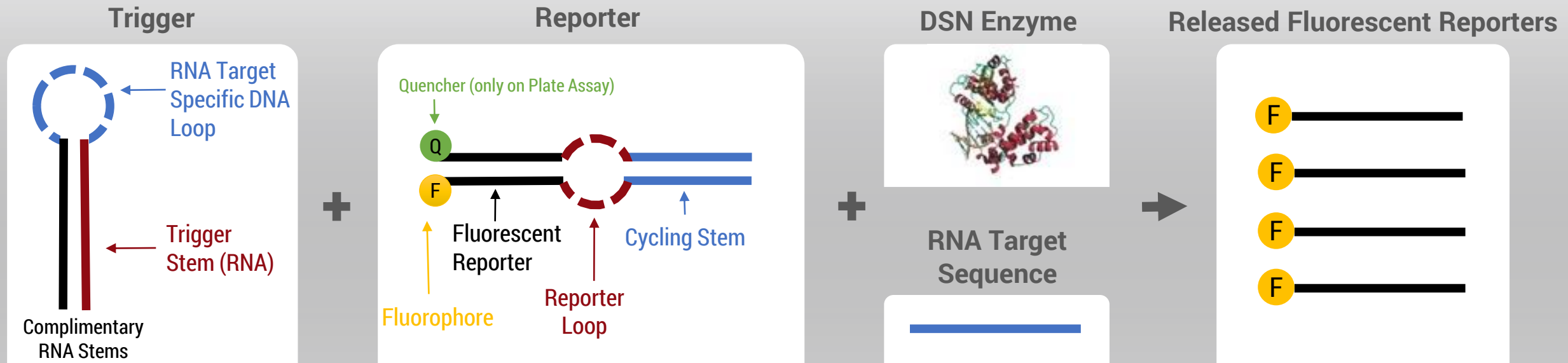
- Digests only dsDNA or the DNA strand of an RNA/DNA hybrid
 - Doesn't digest dsRNA or ssRNA or ssDNA
- Single nucleotide mismatch specificity
- Highly active, resistant to Proteinase K and works in lysis buffers with detergents
- Functions in crude biological sample types (swabs, saliva, urine, blood,...)
- Recombinant enzyme equivalent to natural sourced enzyme



Duplex Specific Nuclease (DSN)

CHASE Molecular Amplification Chemistry for Plate Assay

Coupled Hairpin Amplification System (CHASE)



- CHASE utilizes a pair of molecular hairpins with DNA loops and RNA stems
 - Trigger loop is specific to RNA Target Sequence
 - Reporter loop is specific to Trigger Stem
- CHASE releases Fluorescent Reporter for capture & detection on plate reader or POC instrument

Planar Waveguide Detection Technology

Evanescent Waveguide Biosensor Array Detection

