AUTOMATED RARE ALLELE DETECTION

One workflow. One partnership.
Zero barriers to ultra-sensitive PCR.

PointSuppressor™ by RhoDx

Next-Generation PCR, Automated by Dynamic Devices' LYNX

PointSuppressor™ (PSP) is a high-fidelity, PCR-based assay for ultra-sensitive rare allele detection. It suppresses wild-type (WT) DNA during PCR, allowing mutant alleles to be amplified and detected with very high sensitivity and specificity. Instead of sorting through endless WT reads (as NGS typically requires), PSP removes the WT signal upfront, making rare mutants easy to detect.

Plug Into Your Existing Workflow

Typical PSP Calls Exceed 20x WT Background

The standard for mutant calls is over 5x background wild-type reads

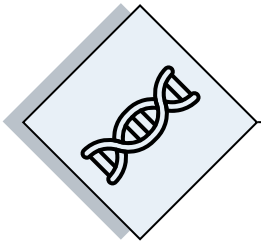
1,000x Cost Benefit

Process more samples per run with fewer instruments, fast turnaround, and a reduced lab footprint

Enables Rare Mutant Detection Down to a 0.02% Limit

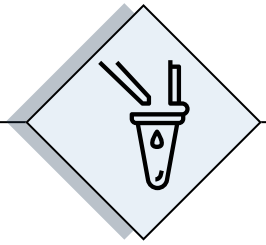
***Detection limits may be lower depending on assay design and sample context.*

Virtually eliminate false negatives caused by sensitivity limits or tissue rejection without any changes to process, complexity, or TAT



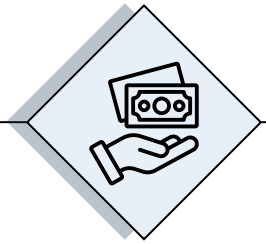
Designed for cfDNA

Efficient detection between 1-50ng of DNA input



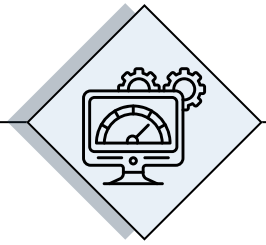
Single-Tube Method

No sample loss, extra steps, or changes to automated workflows



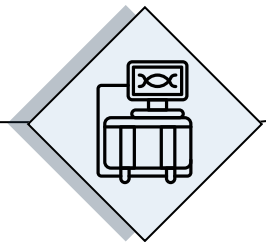
Reduced NGS Cost

Deep sequencing & error correction are no longer needed



Peak Throughput

Requires fewer reads & enables more samples to be run per flow cell



Downstream

Compatible with NGS, Sanger, & genotyping methods (e.g., SBE)

Case Study Statistics

Menin Inhibitor Trials (NPM1mut AML)

- PSP's new test detects NPM1mut insertions, found in ~35% of adult Acute Myeloid Leukemia (AML)

Competitor Q – NPM1 RUO Assays:

- NPM1 mutation Types A, B, and D are detected across two tests ($250.25 per sample)
- ~87.9% of NPM1mut-positive patients were detected

RhoDx – NPM1 PointSuppressor Assay:

- Detects Types A and D and is predicted to detect all NPM1mut 4-bp insertions with a single test
- This includes Types A, B, D, DD, Gm, I, Om, R, and formerly undefined 4-bp insertion mutants

Sanger Sequencing Dataset (T7 Tag)

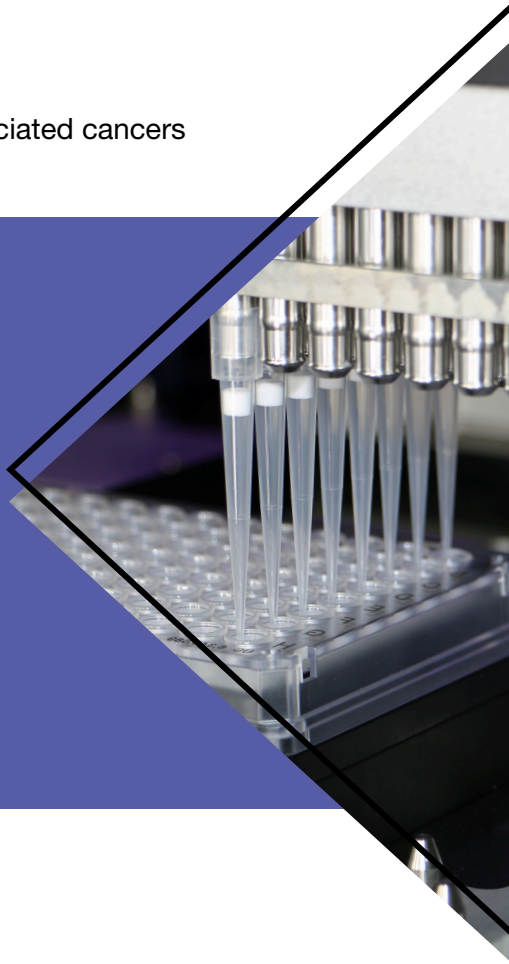
- Sensitivity is as low as 0.07% mutant in some Sanger runs

PSP Tobacco Screen (in Development)

- Proposed to detect more than 3x as many cancers as LDCT
- PSP 20-plex is in development—designed to detect 80% of tobacco-associated cancers

Research Applications

- CANCER RESEARCH & TESTING
- NON-INVASIVE PRENATAL TESTING (NIPT)
- ORGAN TRANSPLANTS
- ANTIMICROBIAL RESISTANCE (AMR)
- VIRUS IDENTIFICATION
- ANIMAL HEALTHCARE & AGRICULTURE



Transform Your Screening Workflows

Cut down on pharma expenses, help more patients, and deliver more reliable test results.

Ready to optimize your lab? Contact Dynamic Devices today to learn how the Lynx can be tailored to your lab's specific screening needs.