



Empowering AML Clinical Research

NPM1mut Detection with PointSuppressor™ PCR

RUO Kit – Now Available for Lynx Automated Workflows

RhoDx & Dynamic Devices

A Groundbreaking Partnership: Automating Rare Allele Detection

RhoDx has proudly partnered with Dynamic Devices to integrate our innovative PointSuppressor (PSP) rare allele detection technology exclusively into Lynx automated workflows. By combining RhoDx's proprietary assay chemistry with Dynamic Devices' robust automation, laboratories can now screen for critical cancer mutations with unprecedented sensitivity, scalability, and ease.

NPM1 Insertion Mutations

1 **NPM1 in AML:** NPM1 insertion mutations (NPM1mut) are the most common genetic mutation in acute myeloid leukemia (AML), found in ~35% of adult AML cases. NPM1mut variants can be used to monitor disease progression, treatment efficacy, and molecular residual disease (MRD). They are also used to determine eligibility for **menin inhibitors** in treating NPM1mut-positive AML.

2 **Screening Flaws:** Despite the importance of NPM1mut detection, existing screening assays fall short. Current commercial options detect only a few set 4-base pair insertions: **Types A, B, and D.**

In the United States...

▶ **75,266 people**
are living with AML

▶ **~20,800 people**
will be diagnosed with AML this year

▶ **~11,220 people**
will die from AML this year

The PointSuppressor Advantage

PointSuppressor PCR exposes variants that other tests miss. With one test, a PSP assay can detect **all 4-base pair insertions**, making it the industry's most comprehensive NPM1 assay.

100% Detection: Captures every NPM1mut variant at the target nucleotide position

Wider Test Margins: PSP's simplified assay design lets labs screen **more patients**, accelerate pharma clinical trial recruitment, and **significantly lower** the costs per test

Company	Types Detected	% Detected	Price/Test (USD)
Q	A, B, D	~87.9%	\$250.25
RhoDx	A, B, D, DD, Gm, I, Om, R, & formerly undefined 4-bp insertion mutants	100%	Inquire



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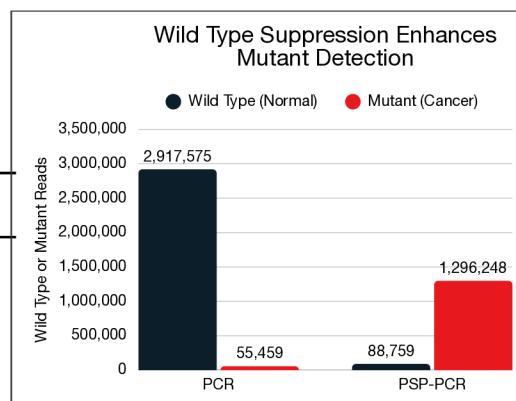
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How Does It Work?

Current next-generation sequencing (NGS) and PCR methods rely on deep sequencing to find rare cancer mutations—essentially looking for a “needle in a haystack.”

PointSuppressor (PSP) simply eliminates the haystack. With just **two simple additions** to a standard high-fidelity PCR master mix, PSP **suppresses the amplification** of normal (wild-type) DNA while letting mutant DNA amplify exponentially. No blockers, allele-specific primers, or special workflow necessary.



Why PSP Excels

Compared to existing technologies—like standard PCR, digital PCR, or mass spectrometry-based methods—PointSuppressor offers a **1,000-fold advantage**.

Unmatched Accuracy & No False Positives: PSP achieves an ultra-sensitive limit of detection (LOD) of 0.02% (1 mutant in 5,000 molecules). Since mutant signals are amplified ~20x above background noise, late-cycle PCR errors can't trigger false results. In a validation study of 64 healthy donors, the assay yielded 0 false positives.

Massive Scalability: Because PSP suppresses uninformative normal DNA reads, expensive error correction and 'deep sequencing' are avoided. Labs can load 1,000x as many samples onto a single sequencing flow cell. With Lynx automation, the workflow requires no complex library prep or molecular barcodes.

Unbeatable Affordability: By maximizing sequencer capacity, capital and run costs drop by orders of magnitude based on the scale of screening. For labs without NGS, the powerful mutant enrichment allows PSP to be read on standard Sanger sequencing (SBE) equipment with the same incredible sensitivity.

Transformative Use Cases

NPM1 Leukemia Testing:

A single PSP assay can amplify all 4-base pair insertion mutations in AML, replacing complex multiplex panels and serving as a perfect companion diagnostic for Menin inhibitors.

Pancreatic & Smoker Screens:

Find KRAS mutations with simple blood draws (liquid biopsies) to catch cancer early.

Broad Applications:

Adapts for transplant monitoring, antimicrobial resistance (AMR), or any application requiring rare allele detection.

Contact Us Today

Learn how automated PointSuppressor technology can transform your lab's high-throughput mutation screening.