



Early Detection of Pancreatic Cancer

PointSuppressor™ PCR for KRAS Mutation Detection

RUO Kit – Now Available for Lynx Automated Workflows

RhoDx & Dynamic Devices

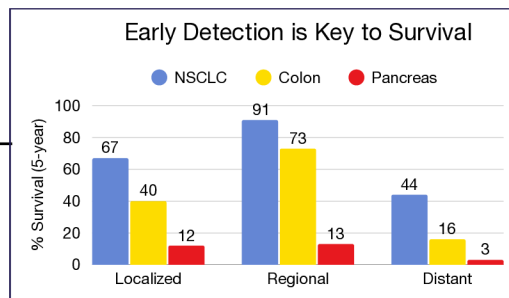
A Groundbreaking Partnership: Automating Rare Allele Detection

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.

Importance of Cancer Screening

1 The Survival Gap: If pancreatic cancer is caught early (localized), the 5-year survival rate is 44%; however, if caught late (distant metastasis), the survival rate plummets to just 3%.

2 Screening Flaws: There is currently no USPSTF-recommended screening routine for pancreatic cancer available to the general public. Traditional diagnosis requires a series of imaging scans and biopsies, usually only performed after symptoms appear. In addition, existing blood tests to measure CA 19-9 proteins are highly unreliable for early detection.



High-Risk Groups

Tobacco use, type 2 diabetes, age, obesity, and heavy alcohol use **increase pancreatic cancer risk.**

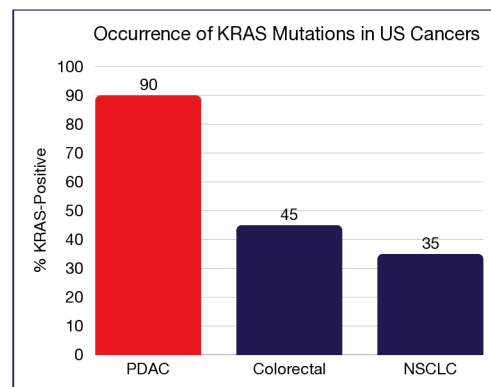
⚠️ Tobacco Users
Tobacco use causes 40% of all cancers, and cigarette smokers are 2x as likely to get pancreatic cancer.

⚠️ Type 2 Diabetics
Patients with type 2 diabetes face a 1.5 to 2x increased risk of developing pancreatic cancer.

⚠️ Other Risk Factors
Individuals aged 60+, obesity, heavy alcohol use, or benign precancerous cysts (IPMNs) increase cancer risk.

KRAS: The “On/Off” Switch

KRAS mutations are the main genetic driver of Pancreatic Ductal Adenocarcinoma (PDAC) and are present in 90-95% of cases. A KRAS mutation acts like an ‘on/off’ switch stuck in the ‘on’ position, driving healthy cells to transform into cancerous ones. Since these mutations occur early in cancer development, detecting KRAS circulating tumor DNA (ctDNA) offers a critical window for life-saving early intervention.





Early Detection of Pancreatic Cancer

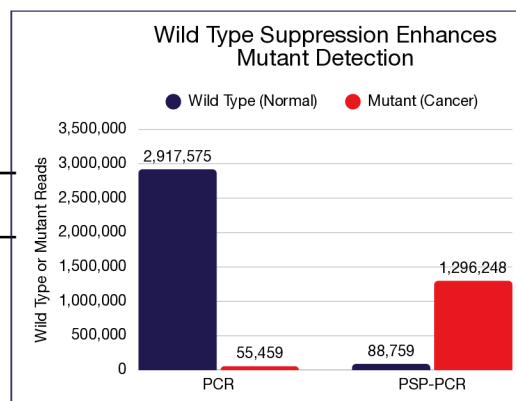
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Automated PointSuppressor Technology

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

Pancreatic & Smoker Screens:

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

NPM1 Leukemia Testing:

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

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.