

Pinpoint FISH™ (PPF) Assay Services

What is Pinpoint FISH?

Pinpoint FISH (PPF) is a synthetic oligonucleotide-based FISH assay designed to provide the highest resolution, lowest background, and lowest limit of detection available. KromaTiD probes can be used in standard FISH assays, delivering improved specificity and hybridization kinetics.

PPF allows researchers to expand beyond the limitations of conventional FISH probes to detect smaller targets and design high specificity tests.

Any FISH Application

KromaTiD offers genome wide, custom Pinpoint FISH assays engineered to meet your specific requirements. Using our proprietary design approach, KromaTiD provides assays optimized for detecting small targets, specific breakpoints or transgene inserts. Pinpoint FISH can also be used for more conventional FISH applications including:

- Deletions
- Amplifications & CNVs
- Break aparts (gene loss-of-function)
- Fusion gene detection

Production under a GLP Quality Management System is available if probes meeting the requirements of Analyte Specific Reagents are required.

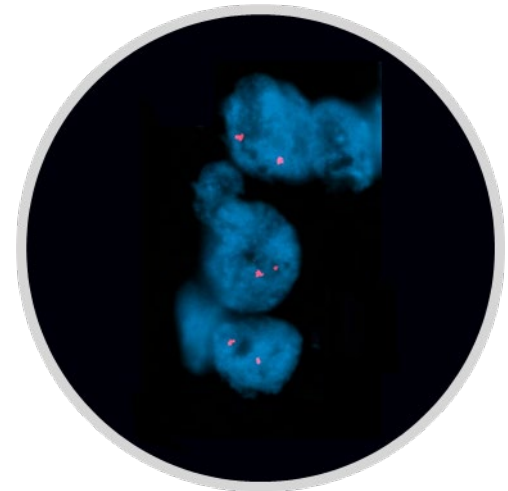


Figure 1: Evaluation of HER2 amplification by Pinpoint FISH. Breast cancer tissue was probed with KromaTiD HER2 probe (red) and analyzed for amplification. Shown here is an example of a normal (non-amplified) HER2 signal.

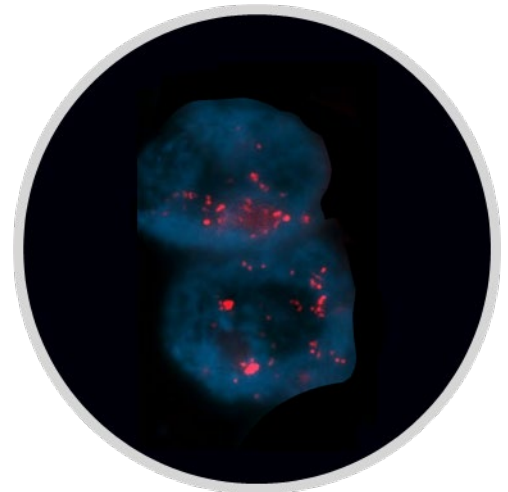


Figure 2: Breast cancer tissue analyzed using Pinpoint FISH probes (red), demonstrating HER2 amplification.

Pinpoint FISH is the Most Powerful Custom FISH Assay on the Market

Smallest Targets

PPF routinely detects targets as small as 5-10 kb in metaphase spreads or dissociated cells, providing researchers with LLOD orders of magnitude lower than BAC FISH probes.

Unmatched Performance

- Industry leading resolution and signal-to-noise ratio
- Repeat-free design results in lower background interference and higher signal-to-noise

Highly Customizable and Flexible

- PPF probes can be designed and engineered against any published genome, allowing for the widest range of targets and target sizes available.
- Comprised of synthetic probes designed against a unique sequence, PPF is perfectly suited to detect mutations with variable breakpoints.

Equipment and Sample Requirements

KromaTiD has designed the Pinpoint FISH platform to minimize adoption costs and training. For labs that currently run FISH, PPF assays will work with your established samples, workflow and imaging systems without any capital expenditures. PPF probes have been tested, and shown to work well, in combination assays with BAC probes.

Sample Types

FFPE
Fixed cell pellet
Any FISH sample
Published mammalian genomes

Equipment

Standard FISH equipment
Standard FISH consumables

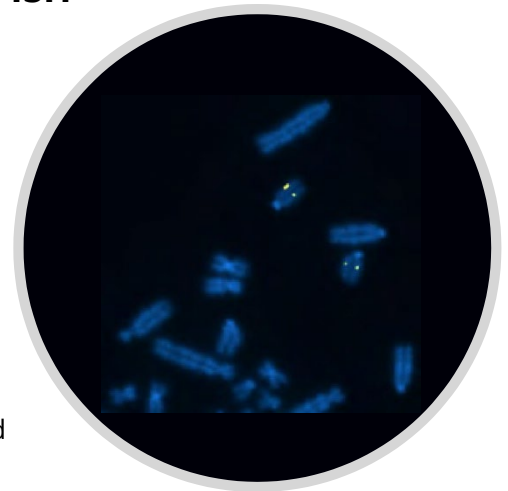


Figure 3: Evaluation of small target integration in mammalian cells. In this system, a control probe (yellow) and a target probe (red), were used to evaluate chromosomal integration events of a ~10kb de-identified target sequence. Shown here is an example of a cell with no target probe, only control probes present in both homologs.

For labs that do not run FISH but are interested in the high-resolution target data that only Pinpoint FISH can provide, KromaTiD's service division can perform projects ranging from single sample analysis to full library screening; all we need from you is a sample.

KromaTiD can design and produce fully custom probes or assays for targets in any published genome.

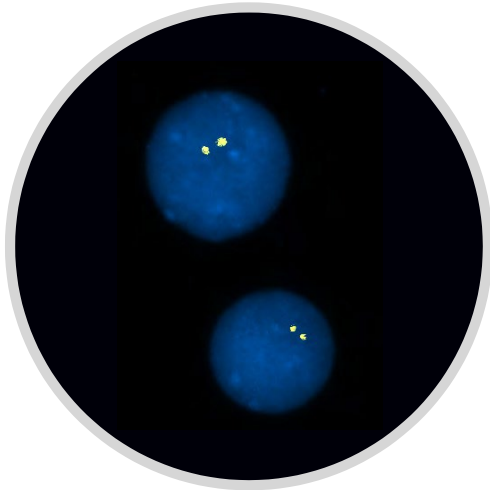


Figure 4: A lymphoblast cell line (GM15510) was fixed in methanol:acetic acid fixative and probed with KromaTiD p53 probe (yellow).

PPF Assay Services Pricing

Catalog Number	Services	Cost
PPF-010	Standard Probe Production: Design and verification of standard probes	\$1,444
PPF-011	Custom Probe Production: Design and verification of custom probes	Inquire
PPF-002	T-Cell Culture Development: Thaw, recovery, and harvest optimization	\$1,209
PPF-014	T Cell Metaphase Prep and Harvest	\$1,209
PPF-007	IPSC Cell Culture Development: Thaw, recovery, and harvest optimization	\$1,344
PPF-012	IPSC Metaphase Prep and Harvest	\$1,344
PPF-009	Whole Blood Culture Development: Thaw, recovery, and harvest optimization	\$739
PPF-013	Whole Blood Metaphase Prep and Harvest	\$739
PPF-017	NK Cell Culture Development: Thaw, recovery, and harvest optimization	\$1,209
PPF-016	NK Cells Metaphase Prep and Harvest	\$1,209
PPF-006	1 probe assay, 200 cells counted per sample, interphase. Execution and Analysis	\$3,816
PPF-015	1 probe assay, 500 cells counted per sample, interphase. Execution and Analysis	\$4,543
PPF-020	2 probe assay, 20 cells counted per sample, interphase. Assay Execution and Analysis	\$1,441
PPF-005	2 probe assay, 200 cells counted per sample, interphase. Assay Execution and Analysis	\$5,001
PPF-018	2 probe assay, 500 cells counted per sample, interphase. Assay Execution and Analysis	\$5,952
PPF-004	3 probe assay, 200 cells counted per sample, interphase. Assay Execution and Analysis	\$6,187
PPF-019	3 probe assay, 500 cells counted per sample, interphase. Assay Execution and Analysis	\$7,380
PPF-003	4 probe assay, 200 cells counted per sample, interphase. Assay Execution and Analysis	\$8,425
PPF-AUT	Assay Development and Automation	Inquire
PPF-DEV	Assay Development and Qualification	\$5,375
PPF-BUF-001	FISH Buffers – 10 tests	\$6

Customer Notification

- All Products and Deliverables are supplied for internal scientific research purposes only and are not intended for i) human consumption, including, but not limited to, foods or pharmaceuticals, ii) diagnostic purpose including, but not limited to, human or veterinary *in vivo* or *in vitro* diagnostics, or use in cosmetics or other goods. Research purposes means *in vitro* laboratory studies or *in vivo* use in laboratory organisms only.
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