

# Snapshot: Build your biobanking house on solid footing

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Sampled is proud to work alongside Fluidigm to provide clients with cutting edge platforms that are cost effective, rapid and confirms DNA quality for downstream applications. If you would like to learn more about our services, you can speak to one of our experts by e-mailing:

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## Background

Commercial pressures are turning researchers to look to smarter ways of working. Sampled provides solutions that reduce costs and allow clients across multiple research fields to access cutting-edge technologies including NGS, cellular assays, stem cells, sample storage and more. Thus, reducing expenditures, ongoing investment and routine management while maximizing R&D ROI.

Sampled utilizes Fluidigm® microfluidic technology to offer clients Functional quality control (FQC) and identity validation for all samples that are processed. Through several platforms manufactured by Fluidigm, Sampled have carried out quality control validation on over 1.6 million samples.

## Core Advantages to Biosample authentication and validation with Sampled

- Cost effective: incorporated in all processing workflows (cell line derivation, nucleic acid extraction, etc.) at Sampled
- Rapid: Data generation in under 4 hours
- Validation: Confirms sample identity from end to end, with an ability to perform concordance analysis after downstream applications
- Investigation: Identifies errors in sample collection at collection sites
- Quality Control: Confirms DNA quality before downstream applications such as genotyping and NGS

## Case Study

How Sampled resolved sample identity discrepancies through FQC:

The problem	The solution
Control DNA samples with known genotypes were obtained from a public biorepository per client request and genotyped on Axiom arrays	Internal processing integrity confirmed by concordance analysis comparing Sampled FQC data generated on DNA samples on receipt against the subsequent Axiom microarray data generated in our lab: the public biorepository was confirmed as the source of incorrect sample identity
Pharmaceutical client reports control samples' Axiom genotypes do not match expected results based on available NCBI data	Sampled FQC data used to reassign the appropriate IDs to each sample