

Propel Your Research Forward

Custom Assay Development And Biomarker Testing Services

Canopy's CLIA-certified lab is your trusted partner for biopharmaceutical research, custom assay development, clinical sample testing, and quality data acquisition and reporting. Access our full suite of services to detect and analyze proteins and nucleic acids across a variety of traditional and novel histopathology techniques. Accelerate your research with our Contract Research Organization by working with our dedicated and trustworthy scientists to meet your objectives in record time, without compromising quality.

- Routine and special histology staining
- Biomarker and custom assay development
- Pathologist-guided tumor scoring
- Quality data reporting & pathologist review
- Procurement and specimen management
- Fixation, embedding, and sectioning



Figure 1. Canopy's CLIA-certified Hayward, CA facility is a leading CRO for clinical and pre-clinical sample analysis specializing in routine and specialty histology and molecular analysis.

A Client-Centered Approach

Work with an experienced team of Canopy Biosciences scientists dedicated to creating a customized approach to suit your project needs. Working with our client, we create create a custom project design document to determine scope of work to detail how we can best serve your research objectives. We are committed to maintaining our core values to deliver robust, quality results, in an efficient and cost-effective manner, regardless of project scope.



Assay Development Process

Canopy's CLIA-certified lab has tested over 10,000 samples for over 150 projects, propelling global scientific research. Our custom assay development and biomarker testing services are trusted by scientists and clinicians around the world.

Feasibility Studies

Evaluating client needs and designing initial feasibility tests to evaluate reagents and reference materials requires experience and expertise. Orthogonal validation studies are designed to collect complimentary data for analysis. Performing antibody screening and determining appropriate reagent pairs ensures accurate results.

Prototype Testing

Our scientists select the best antibody pair for prototype development and identify potential problems and areas for improvement to ensure the product meets clients' needs and expectations. By working with a partner that is just as skilled in the infrastructure and nitty-gritty details of early assay development, you benefit from efficient design and quick ramp up during protocol transfer.

Assay Optimization

Process optimization requires an initial investment in time and resources to save time during assay transfer and troubleshooting. Let us make the initial investment in assay optimization, breaking down the assay to optimize each module to improve data quality and reproducibility, in order to save you time down the road.

Ongoing Evaluation

Assays are validated according to client-defined specifications. Our board-certified pathologists review verification reports and scientists assist with protocol creation for method transfer. Trust the results delivered by your CLIA-Certified, preferred partner for custom assay development and biomarker testing.

FEASIBILITY STUDIES

PROTOTYPE ASSAY OPTIMIZATION

ASSAY VALIDATION

Immuno-Oncology and Drug Development Expertise

Canopy Biosciences has deep expertise in a variety of molecular diagnostic assays and techniques with a focus on molecular oncology. Testing spans the spectrum of solid tumors and hematolymphoid malignancies, including leukemias and lymphomas. Our integrated approach to immuno-oncology and drug development empowers researchers to take advantage of our full-service laboratory, saving you time and resources.



TISSUE PREPARATION



MOLECULAR TESTING



CUSTOM ASSAY DEVELOPMENT



ROUTINE & SPECIAL STAINS



PATHOLOGIST REVIEW

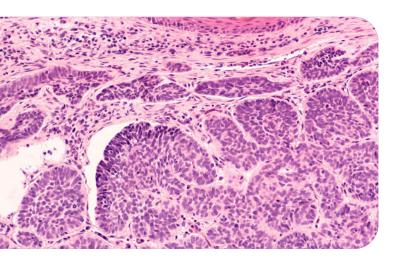


Figure 2. Routine H&E staining and special stains reveal tissue morphology. H&E stained basal cell carcinoma shows distinct morphological features.

"Canopy's CLIA lab has always been a leader in supporting drug development in clinical oncology and has seen an exponential growth in service requests. We're looking forward to continuing to work with cancer researchers around the world to help accelerate drug development in the fight against cancer."

Kevin Gamber, PhD Canopy Biosciences - A Bruker Company



Histopathology & IHC Services by Board-Certified Pathologists

Histology stains are essential tools in all phases of the drug design process, including preclinical and clinical sample testing. From small experiments with just a few samples to large clinical studies with hundreds of samples, assays are tailored to the client's specific needs. Our scientists partner with you to generate data to support your research. From early to late stage drug development, we help clients to:

- Evaluate therapeutic efficacy
- Assess pharmacodynamic effects
- Enroll patients in clinical trials
- Determine appropriate trial arms
- Monitor key cell populations

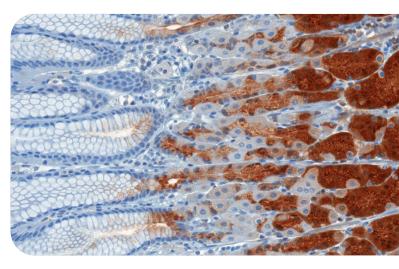


Figure 3. Experienced scientists deliver quality data. Pepsinogen expression in human stomach FFPE tissue.

Clinical Fluorescence *In Situ* Hybridization (FISH)

We offer a broad menu of FISH and mutational analysis tests spanning a wide spectrum of solid tumors including breast, prostate, colon, lung, brain and cervical cancers. With BioView's Allegro™ fluorescent imaging system and Solo™ workstation for FISH analysis, we can provide novel and routine FISH assay development, optimization and validation. This imaging system makes capture and transfer of images to clients easy and seamless.

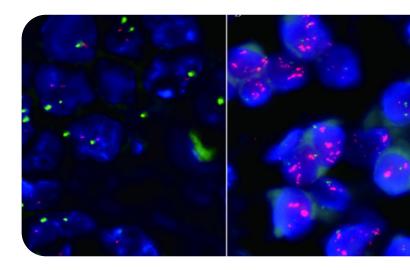


Figure 4. RNA Fluorescence in situ hybridization image showing 2-plex targets in red and green.

Molecular Strategies For High-Throughput Gene Expression Studies

Gene Expression Profiling

NanoString's nCounter® platform has become a leading technology for high-throughput gene expression studies. Canopy has offered nCounter services since 2014 making us a premier service provider. We offer any panel available from NanoString and have experience with various sample types and asssay optimization.

Nucleic Acid Extraction Services

We have spent years developing robust protocols for extraction from FFPE tissue to deliver higher quality and quantities of DNA and RNA. Our scientists are knowledable in procedures for optimizing conditions for every type of sample from fixed tissue to cell pellets and blood samples.

Readily analyze large numbers of clinical trial samples. From nucleic acid extraction to gene expression analysis – we have you covered.



Canopy Biosciences' CLIA-certified lab specializes in highthroughput gene expression studies using the nCounter Analysis System.

> "Canopy's experienced scientific staff work closely with their clients to achieve their objectives. We value our partnership with their knowledgeable scientists to assist with gene expression studies, assay development, and analysis of clinical samples."

Joy Mukherjee | Helen Diller Family Comprehensive Cancer Center at UCSF

Experience Matters. Expertise is Earned. CRO Services for Spatial Transcriptomics



Drive your research forward with a service provide that specializes in oncology and immuno-oncology platforms. As a NanoString® center of excellence, we provide GeoMx® Digital Spatial Profiler (DSP) services to profile the tumor microenvironment.

- Morphologically guided gene expression profiling
- Pre-designed panels for RNA and protein analysis
- Comprehensive end-to-end service with expertise in IHC, pathology, sequencing and nCounter

CanopyBiosciences.com/GeoMx



To learn more, visit CanopyBiosciences.com or email us hello.canopy@bruker.com

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