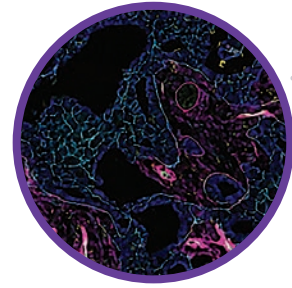
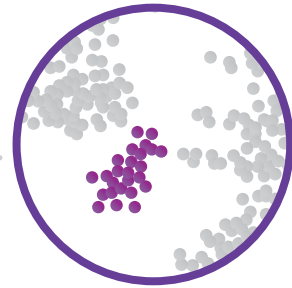


# Introducing PhenoCode Discovery Panels

DESIGNED FOR THE **EVER-EXPANDING BIOMARKER UNIVERSE**



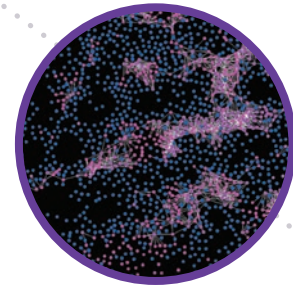
**CELL PHENOTYPING**  
*in situ* at single-cell resolution



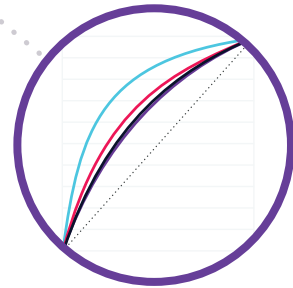
**RARE CELL DISCOVERY**  
by imaging every cell across whole-slide



**FUNCTIONAL STATE**  
mapping with multiomic detection (RNA, protein)



**CELLULAR NEIGHBORHOODS**  
cellular neighborhood analysis enabled by ultrahigh-plex imaging



**SPATIAL SIGNATURE**  
development through high-throughput studies

**A FRAMEWORK FOR COMPREHENSIVE SPATIAL PHENOTYPING**

Simplifying spatial discovery is now a reality.

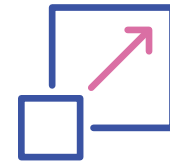
# INTRODUCING PHENOCODE DISCOVERY PANELS

Designed for the ever-expanding biomarker universe



**RELEVANT**

Designed to answer the most critical and pertinent questions in spatial discovery



**SCALABLE**

Mix and match panels to increase plex and answer deeper biological questions



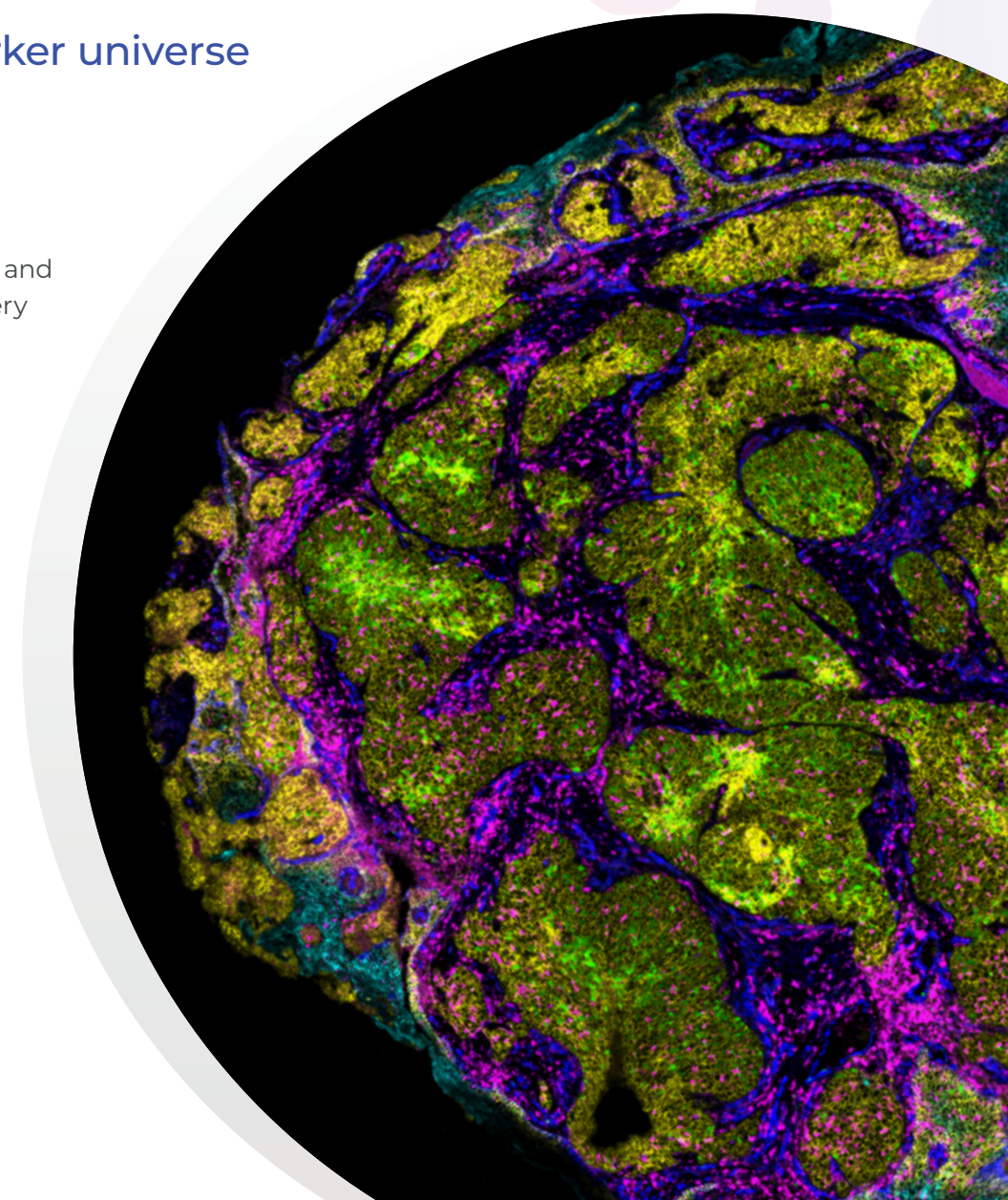
**READY-TO-USE**

Conjugated and validated panels to accelerate your spatial research by 3X



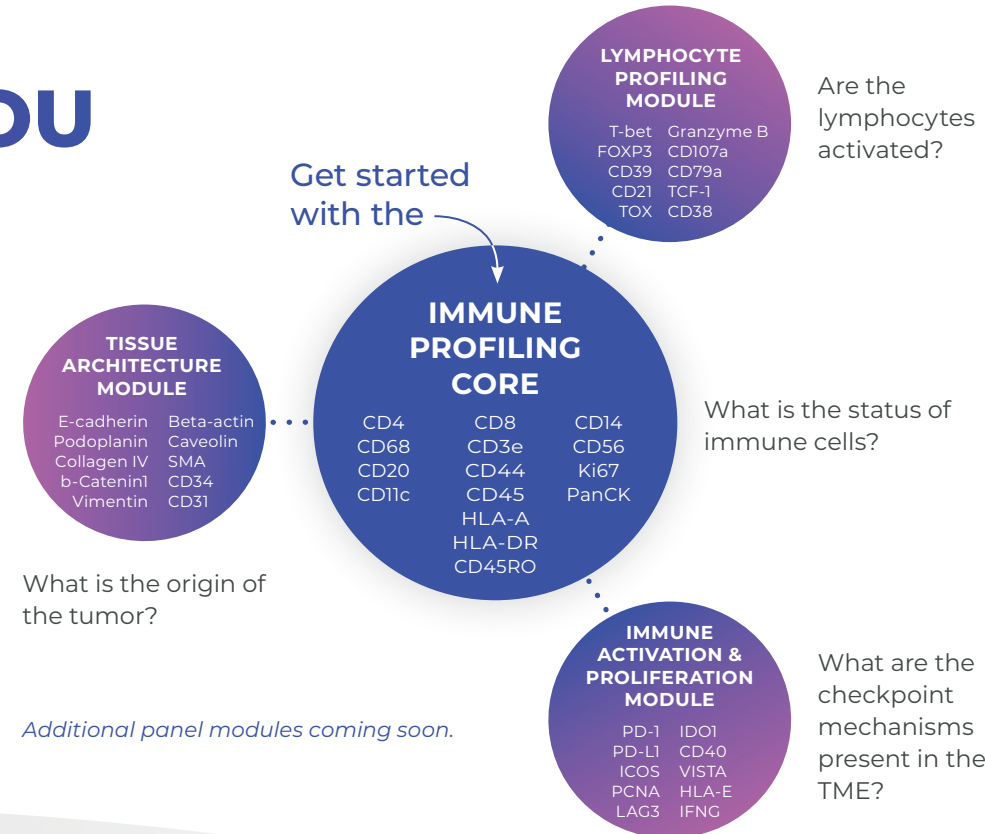
**SIMPLIFIED**

A simplified end-to-end workflow for spatial discoveries



# WHAT WILL YOU DISCOVER?

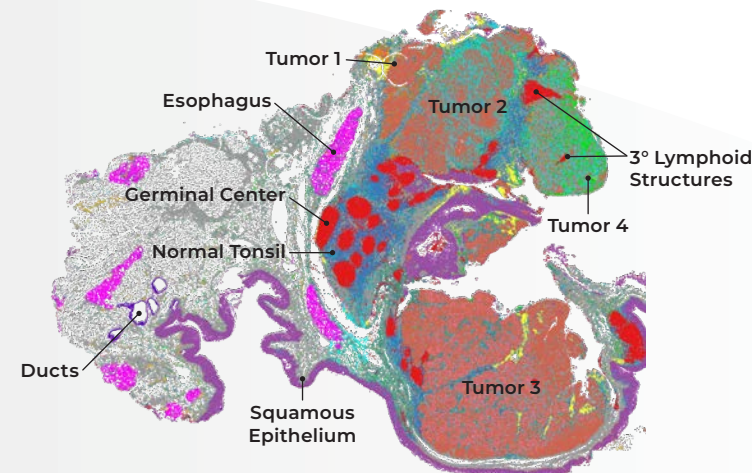
PhenoCode™ Discovery Panels enable thorough interrogation of the tumor and the surrounding tumor microenvironment (TME). Each panel module is meticulously designed with essential markers to answer key biological questions to accelerate your path from question to discovery.



## 100-PLEX CASE STUDY

### Deep Spatial Phenotyping Could Explain Partial Immunotherapy Response

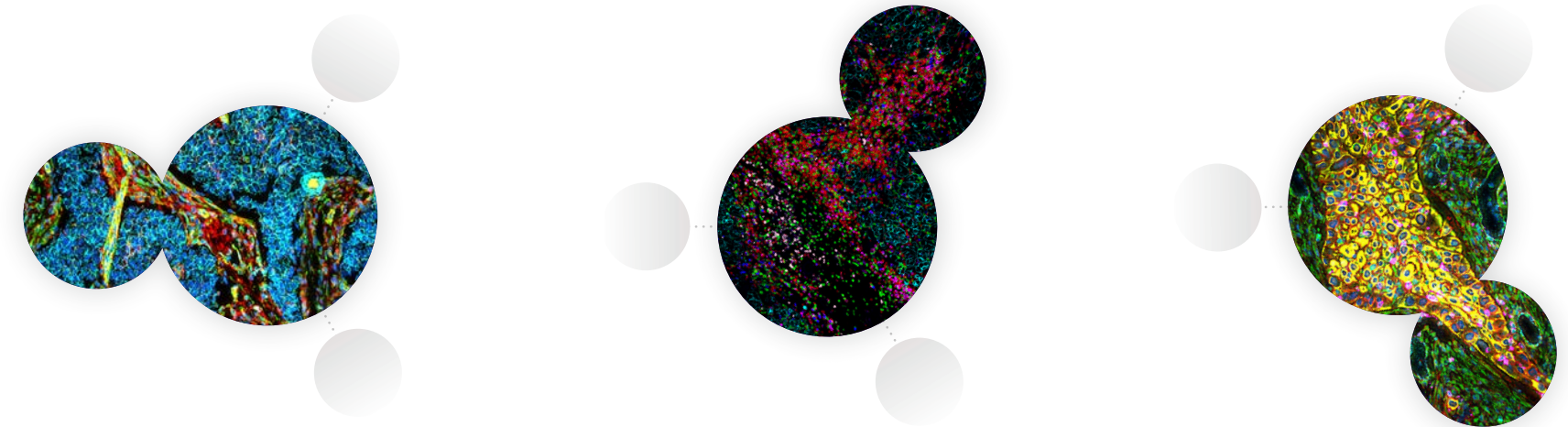
Whole-slide spatial phenotyping of a head and neck cancer sample with a 103-plex panel revealed differences in immune cell infiltration between the four tumor regions (e.g., Tumor region 4 is hot, Tumor region 3 is cold). This heterogeneity may have contributed to the partial immunotherapy response seen in this patient.



DOWNLOAD APP NOTE AT [akoyabio.com/100-plex](https://akoyabio.com/100-plex)

# MIX AND MATCH PANELS TO ANSWER DEEPER QUESTIONS

PhenoCode Discovery Panels can be used on their own or combined to answer different biological questions. Add panel modules together to increase your plex and gain new insights.



**IMMUNE PROFILING CORE + TISSUE ARCHITECTURE MODULE**

Does the tumor have the exclusion phenotype?

**IMMUNE PROFILING CORE + LYMPHOCYTE PROFILING MODULE**

What are the mechanisms of immune activation and evasion in the tumor?

**IMMUNE PROFILING CORE + IMMUNE ACTIVATION & PROLIFERATION MODULE**

What is the functional status of the tumor?

# CATALYZE YOUR SPATIAL DISCOVERIES WITH READY-TO-USE PANELS

PhenoCode Discovery Panels are ready-to-use panels, meticulously designed and validated to reduce upfront assay development and validation time, speeding your spatial discoveries by 3X.

ASSAY DEVELOPMENT AND OPTIMIZATION

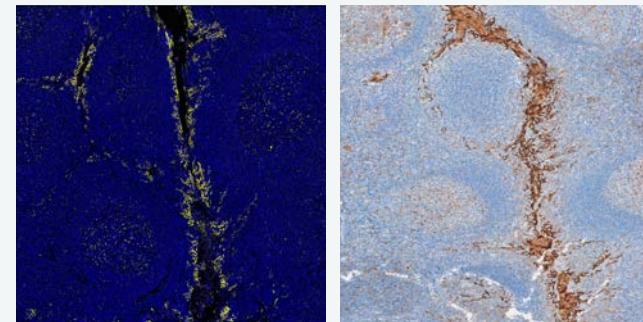


Simply select your panel modules of choice and get started with your research.

TECHNICAL NOTE

## Validation and Development of PhenoCode Discovery Panel Modules

PhenoCode Discovery Panels go through extensive screening, optimization, and validation to maximize performance and efficiency. Discovery panel modules are pre-optimized and have been designed to seamlessly work together to achieve ultrahigh-plex detection enabling time and cost savings.



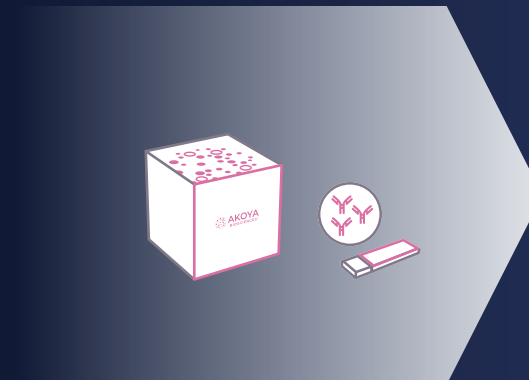
Comparison of PhenoCycler Antibody performance (left panel) with orthogonal DAB IHC (right panel) staining for PD-L1 shows comparable staining and expression patterns in human tonsil tissue.

↓ DOWNLOAD TECHNICAL NOTE AT [akoyabio.com/discovery-validation](https://akoyabio.com/discovery-validation)

# A SIMPLIFIED END-TO-END WORKFLOW FOR SPATIAL DISCOVERIES

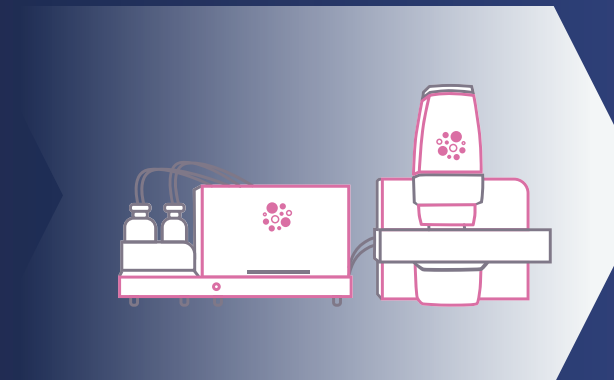
Accelerate your spatial discoveries with ready-to-use panels, the fastest spatial biology platform and streamlined data analysis.

## STAIN



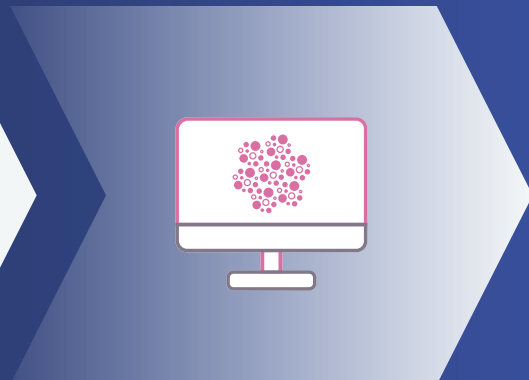
Whole-slide staining of tissues using PhenoCode Discovery Panels.

## IMAGE

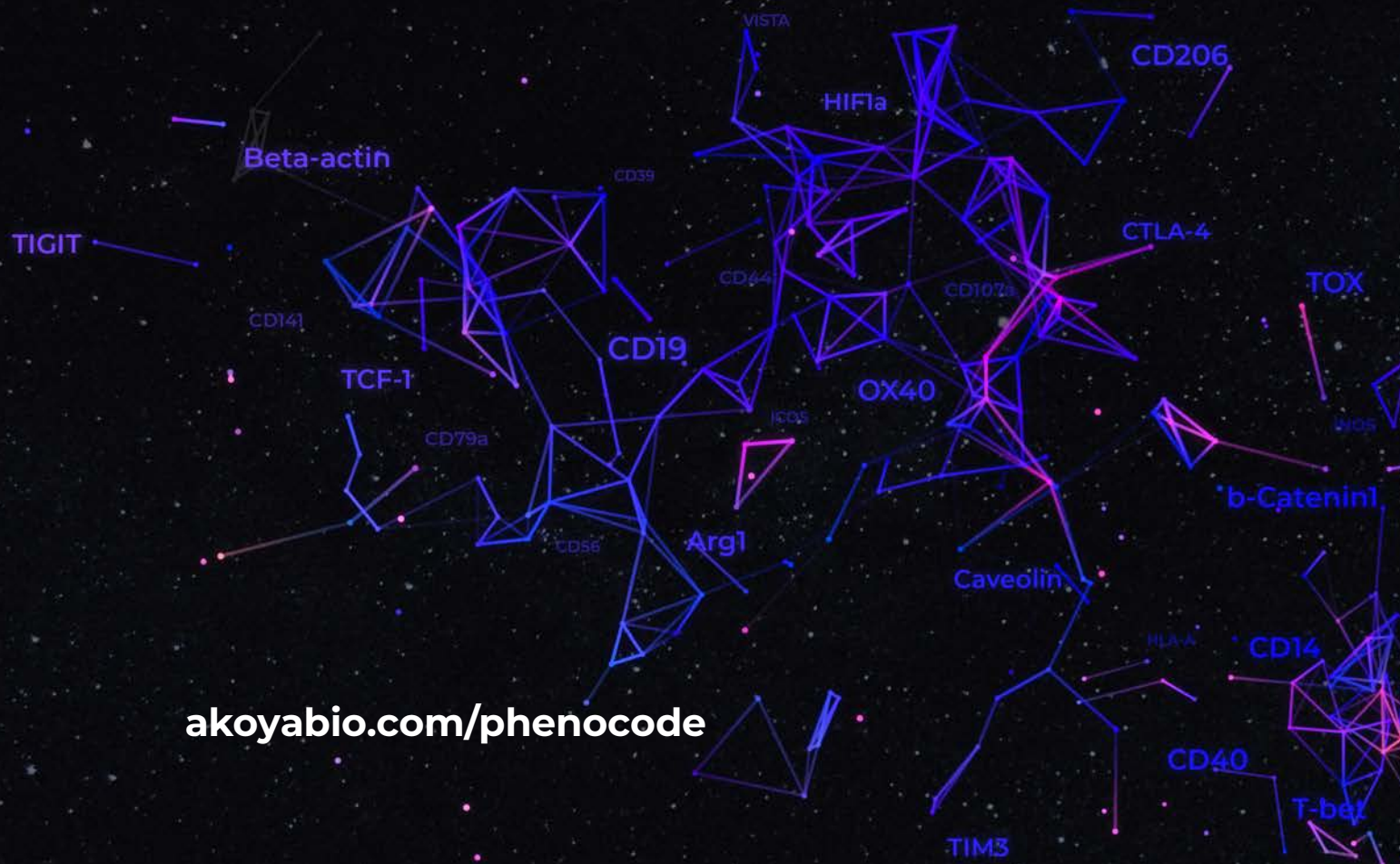


Automated cycling and high-speed imaging with PhenoCycler® -Fusion.

## ANALYZE



Visualize and interpret data using Akoya's software suite or open-source solution.



[akoyabio.com/phenocode](http://akoyabio.com/phenocode)

