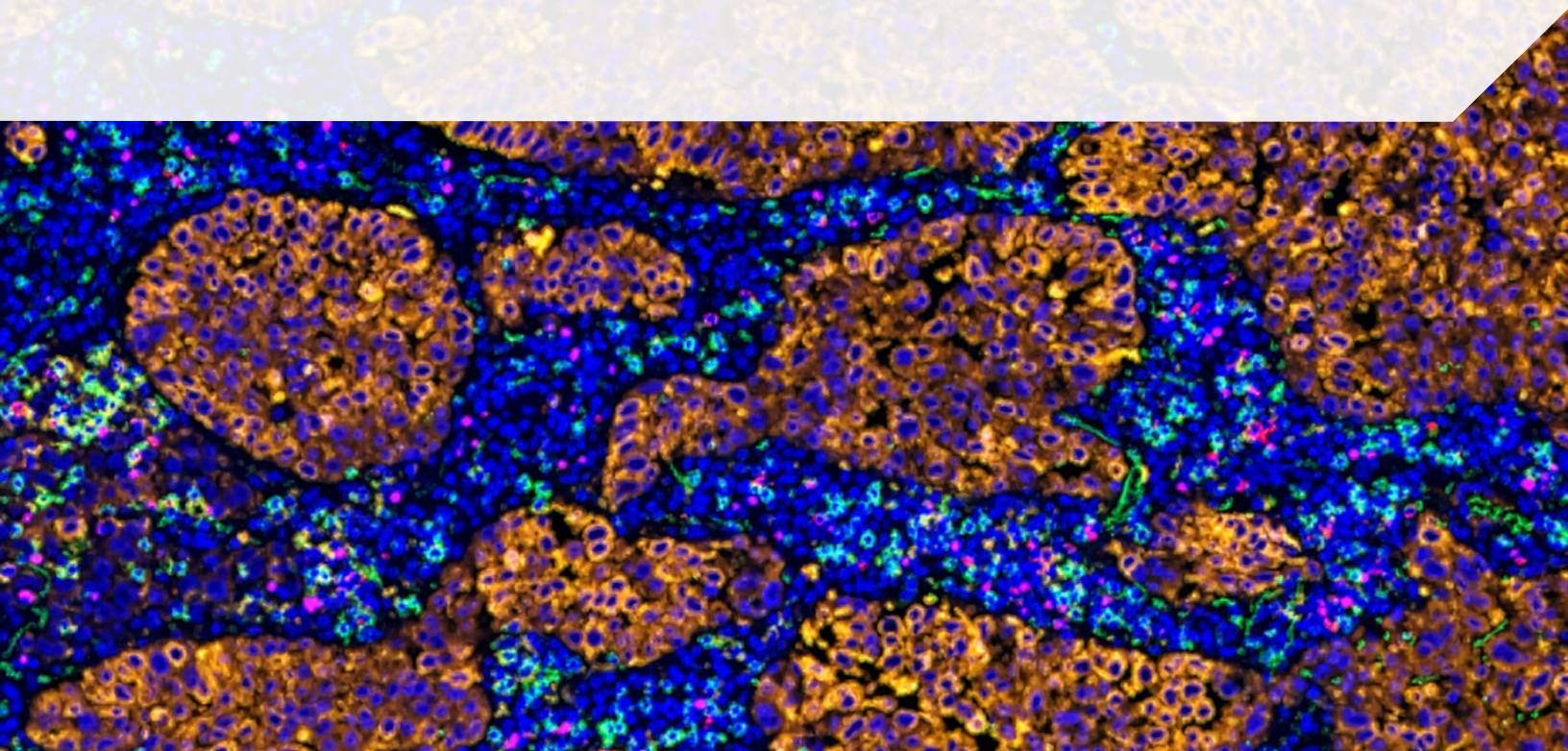


READY TO USE BIOMARKER PANELS

Oncology Collection





From tumor initiation to therapeutic response, **Oncology research increasingly depends on biomarker data that must be robust, translatable, and clinically meaningful.**

Clinicians and translational teams now require the simultaneous assessment of an expanding number of biomarkers to better capture tumor heterogeneity, mechanisms of resistance, and patient response to therapy.

In parallel, **a detailed understanding of the tumor microenvironment has become essential, as spatial organization, cellular interactions, and immune contexture critically influence tumor progression and treatment efficacy.** However, developing and validating biomarker panels that integrate scale, spatial resolution, and translational relevance remains time-consuming, costly, and scientifically demanding.

Over the last two decades, Aliri has partnered with oncology researchers to develop and apply high-quality biomarker panels across translational and clinical studies.

Leveraging multiple advanced analytical platforms, we enable the detection of anything from a single biomarker to several hundred markers, across tissue sections (imaging/profiling), tissue homogenates, cell suspensions, and biological fluids.

To expedite your research and minimize development costs, we have translated our years of oncology biomarker expertise into 24 ready-to-use panels. These panels are designed to address key oncology questions that are critical for understanding disease biology and therapeutic response, including for example:

- Tumor characterization
- Immune contexture
- Pathway activation
- Target engagement
- Patient Stratification

What truly sets Aliri apart is our ability to **customize with precision.** In addition to our ready-to-use panels, we offer **more than 200 standalone biomarkers** and the flexibility to add markers of interest or design fully bespoke panels tailored to your specific scientific objectives.

Every biomarker is carefully selected and rigorously verified for its intended biological context. While all markers included in the panels are precisely targeted, their actual detection may vary depending on tissue type, disease state, and marker abundance.

Aliri's expertise ensures robust assay design and scientifically sound interpretation, so you can move forward with confidence in your data.

Oncology Collection

HUMAN SOLID TISSUE IMAGING & PROFILING PANELS

MOLECULES	PANEL NAME	PLEX	APPLICATION	PLATFORM	PAGE
Transcripts	Whole Transcriptome Atlas	18,000	Biomarker discovery & disease mechanisms	GeoMX DSP	4
	Whole Transcriptome	18,000	Biomarker discovery & disease mechanisms	Visium	5
	Cancer Transcriptome Atlas	1,800	Biomarker discovery & tumor-immune microenvironment characterization	GeoMX DSP	6
	Human Oncology	1,200	Biomarker discovery & tumor-immune microenvironment characterization	Visium	7
	TCR Profiling	146	T-cell receptor biology and functional states characterization	GeoMX DSP	8
Proteins	Discovery Proteome Atlas	1,200	Biomarker discovery & pathway analysis	GeoMX DSP	9
	IO Proteome Atlas	570	Biomarker discovery & MoA	GeoMX DSP	10
	Solid Tumor	240	Tumor and tumor microenvironment characterization & MoA	Visium	11
	ImmunoOncology Profiling (IO)	96	Immune Profiling and MoA	GeoMX DSP	12
	ImmunoOncology Imaging (IO)	30	Tumor immune microenvironment characterization & MoA	Imaging Mass Cytometry	13
	Pan-Tissue Multiplex	28	Biomarker discovery & MoA	Imaging Mass Cytometry	14
	Tumor Microenvironment	25	Biomarker discovery & MoA	Imaging Mass Cytometry	15
	TILs	18	MoA	Imaging Mass Cytometry	16
Metabolites	Amino Acids	20	Amino acid metabolism, Tissue heterogeneity, Therapy response, MOA	Mass Spectrometry Imaging	17
	Glycolysis	9	Tissue metabolism, Resistance, MoA	Mass Spectrometry Imaging	18
	Krebs Cycle	9	TCA metabolism, Tissue heterogeneity, Therapy response, MOA	Mass Spectrometry Imaging	19
	ATP Pathway	5	Energy metabolism, Tumor heterogeneity, Therapy response, MoA	Mass Spectrometry Imaging	20
	IDO1 Pathway	2	IDO1 activity, Immune modulation, Therapy response	Mass Spectrometry Imaging	21
Lipids	Lipidomics (Negative)	166	Tumor metabolism, Resistance, MoA	Mass Spectrometry Imaging	22
	Lipidomics (Positive)	84	Tumor metabolism, Resistance, MoA	Mass Spectrometry Imaging	23

HUMAN FLUIDS, SOLID TISSUE HOMOGENATES, & CELL SUSPENSION PANELS

MOLECULES	PANEL NAME	PLEX	APPLICATION	PLATFORM	PAGE
Transcripts	Tumor Signaling 360	780	Tumor biology, biomarker discovery, & MoA	nCounter	24
	CAR-T Characterization	780	CAR-T product characterization & MoA	nCounter	25
	Pan-Cancer Immune Profiling	770	Immune landscape of tumor characterization & MoA	nCounter	26
	Pan-Cancer Pathways	770	Core oncogenic signaling pathways	nCounter	27



WHOLE TRANSCRIPTOME ATLAS PANEL

Profiling Panel:

The GeoMx DSP Whole Transcriptome Atlas (WTA) is a spatial transcriptomics assay that enables unbiased RNA profiling of approximately 18,000 human genes from spatially defined regions of interest within tissue sections. Using UV-photocleavable probes and NGS readout, it preserves spatial context while providing whole-transcriptome coverage, making it well suited for biomarker discovery and translational research.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Immune cell signaling and activation	18,000 Genes
Cytokine and chemokine signaling	
Tumor proliferation and survival	
Stress and cell death pathways	
Stromal and extracellular matrix biology	
Antigen presentation and immune regulation	



WHOLE TRANSCRIPTOME PANEL

Imaging Panel:

Visium HD Whole Transcriptome enables high-resolution spatial gene expression profiling across tissue sections, measuring the whole transcriptome (~18,000 human genes) while preserving precise spatial location at near-cellular resolution. It allows researchers to map gene expression and biological pathways directly onto tissue architecture.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Immune cell signaling and activation	18,000 Genes
Cytokine and chemokine signaling	
Tumor proliferation and survival	
Stress and cell death pathways	
Stromal and extracellular matrix biology	
Antigen presentation and immune regulation	



CANCER TRANSCRIPTOME ATLAS PANEL

Profiling Panel:

GeoMx DSP Cancer Transcriptome Atlas (CTA) is a targeted spatial transcriptomics panel covering 1,800 cancer-relevant genes. It captures key oncogenic, immune, stromal, and tumor-immune interaction pathways using ROI-based profiling, providing a focused and cost-effective option for oncology and immuno-oncology studies.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Tumor proliferation and oncogenic signaling	1,800 Genes
Tumor-immune interactions	
Immune activation and immune evasion	
Stromal and tumor microenvironment biology	



HUMAN ONCOLOGY PANEL

Imaging Panel:

The Visium Human Oncology Panel is a targeted spatial transcriptomics panel measuring approximately 1,200 cancer- and immune-related genes across whole tissue sections using the Visium platform. It enables spatial analysis of key oncogenic, immune, and stromal pathways while preserving tissue architecture, supporting oncology and immuno-oncology research.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Tumor proliferation and oncogenic signaling	1,200 Genes
Tumor-immune interactions	
Immune activation and immune evasion	
Stromal and tumor microenvironment biology	



TCR PROFILING PANEL

Profiling Panel:

GeoMx DSP TCR Profiling is a targeted spatial transcriptomics panel measuring 146 T-cell receptor (TCR)- and T-cell-related genes within user-defined regions of interest (ROI) in tissue sections. It enables spatial characterization of T-cell presence, activation, and receptor biology, supporting immuno-oncology research, biomarker discovery, and assessment of immune contexture in tumors.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
T-cell receptor structure and signaling (TCR α/β chains, CD3 complex)	40-50
T-cell activation and co-stimulatory signaling	25-35
T-cell differentiation and lineage markers	20-25
T-cell exhaustion and inhibitory signaling	15-20
Cytokine signaling relevant to T-cell function	15-20
T-cell trafficking and tissue residency	10-15



DISCOVERY PROTEOME ATLAS PANEL

Profiling Panel:

The GeoMx Discovery Proteome Atlas (DPA) is a high-plex, antibody-based spatial proteomics panel comprising over 1,200 pre-validated human protein targets. Protein expression is quantified within user-defined regions of interest, which can range from multicellular regions down to single-cell-scale ROIs, depending on tissue architecture. This enables discovery-level spatial proteomics across immune, tumor, and microenvironment pathways and can be integrated with GeoMx RNA assays within the same regions.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Immune cell activation and signaling	250-300
Cytokine and inflammatory signaling	150-200
Tumor growth, proliferation, and survival signaling	200-250
Oncogenic and receptor signaling pathways	180-220
Stromal and extracellular matrix biology	150-200
Cell stress, apoptosis, and cell death	120-160
Angiogenesis and vascular biology	89-120
Cell adhesion, migration, and invasion	120-160
Post-translational modifications (phospho, glyco, ubiquitin, etc.)	130+



IO PROTEOME ATLAS PANEL

Profiling Panel:

The GeoMx IO Proteome Atlas Panel is a targeted, antibody-based spatial proteomics panel measuring approximately 570 immuno-oncology-relevant proteins within user-defined regions of interest (ROI) in tissue sections. It enables spatial profiling of immune cell populations, immune activation and suppression states, cytokine signaling, and tumor-immune interactions to support translational immuno-oncology research and spatial biomarker discovery.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Immune cell lineage and phenotyping (T, B, NK, myeloid)	120-150
T-cell activation and costimulatory signaling	80-100
Immune checkpoint and immune suppression pathways	60-80
Cytokine and chemokine signaling	70-90
Innate immune activation (myeloid, NK, interferon pathways)	60-80
Antigen processing and presentation	40-60
T-cell exhaustion and dysfunction	40-60
Immune cell trafficking and migration	30-50
Tumor-immune interaction markers	40-60
Cell stress and immune-related signaling	20-40



Oncology Collection

PROTEINS

SOLID TUMOR PANEL

Imaging Panel:

The Visium Solid Tumor Protein Panel is a 240-plex, antibody-based spatial proteomics panel designed to profile tumor and tumor microenvironment proteins across whole tissue sections using the Visium platform. It enables spatial mapping of tumor cell states, immune infiltration, and stromal features while preserving tissue architecture, supporting translational oncology research and protein-based biomarker discovery.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Tumor cell identity, proliferation, and survival	50-60
Oncogenic signaling pathways (e.g. MAPK, PI3K/AKT)	30-40
Tumor-immune interactions	30-40
Immune cell infiltration and activation	35-45
Immune suppression and checkpoint pathways	20-30
Stromal and extracellular matrix biology	25-35
Angiogenesis and vascular biology	15-25
Cell stress, apoptosis, and damage response	15-25



IMMUNO-ONCOLOGY PROFILING PANEL

Profiling Panel:

The GeoMx Immuno-Oncology (IO) Protein Panel is a targeted antibody-based spatial proteomics panel measuring 96 immuno-oncology-relevant proteins within user-defined regions of interest (ROI) in tissue sections. It enables spatial characterization of immune cell populations, immune activation and suppression states, and tumor-immune interactions, supporting translational immuno-oncology research and protein-based biomarker discovery.

Tissue preparation:

FFPE and frozen tissue samples.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Immune cell lineage and phenotyping (T, B, NK, myeloid)	25-30
T-cell activation and co-stimulatory signaling	15-20
Immune checkpoint and immune suppression pathways	10-15
Cytokine and chemokine signaling	10-15
Innate immune activation (myeloid, interferon-related markers)	10-15
Antigen presentation and immune regulation	8-12
Tumor-immune interaction markers	8-12
Cell stress and immune-related signaling	5-8



IMMUNO-ONCOLOGY IMAGING PANEL

Imaging Panel:

The imaging mass cytometry (IMC) Immuno-Oncology Panel enables comprehensive characterization of the tumor immune microenvironment, supporting spatial analysis of anti-tumor immune responses and immune evasion mechanisms.

The panel captures

- T-cell composition and functional subsets
- Immune checkpoint expression and T-cell exhaustion states
- Innate and myeloid immune populations
- Cytotoxic effector activity
- Stromal and structural tissue context
- Vascular components
- Cell proliferation

Tissue preparation:

FFPE tissue samples.

Included in the Panel:

30 BIOMARKERS				
CD20	CD8	CD11b	a-SMA	CD45RO
CD3	CD16	HLA-DR	Vimentin	Ki67
CD28	CD56	CD69	CD31	CD66b
CD4	CD68	CTLA4	CD25	CD15
CD25	CD14	Tim-3	Granzyme B	PD-1
FoxP3	CD163	Lag-3	CD45RA	PD-L1

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PAN-TISSUE MULTIPLEX PANEL

Imaging Panel:

The Imaging Mass Cytometry (IMC) Pan-Tissue Multiplex Panel enables comprehensive characterization of diverse tissue types by profiling epithelial, stromal, vascular, immune, and functional compartments at single-cell resolution across the tissue.

The panel captures

- Epithelial compartments
- Stromal components
- Vascular structures
- Broad immune cell content
- Cell proliferation and apoptosis
- Extracellular matrix (ECM) features

Tissue preparation:

FFPE tissue samples.

Included in the Panel:

30 BIOMARKERS				
Pan-CK	CD3	pS6	E-cadherin	CD56
CK19	CD8	pERK1/2	CE-Cadherin	ki67
α -SMA	CD68	CD44	CD45	Granzyme B
Fibronectin	CD163	CK8/18	CD4	pSTAT3
CD31	HLA-DR	Vimentin	CD20	Desmin
Endomucin	Caspase-3	Collagen I	CD11c	Podoplanin



TUMOR MICROENVIRONMENT PANEL

Imaging Panel:

The 31-marker Human Immuno-Oncology Imaging Mass Cytometry (IMC) panel is designed for comprehensive spatial profiling of the tumor microenvironment at single-cell resolution. It integrates markers of tissue architecture, immune lineage, functional state, and stromal context, enabling simultaneous assessment of tumor cells, immune infiltrates, and supporting microenvironmental features within intact tissue sections.

The panel captures

- Major immune populations
- Immune activation, exhaustion, and proliferation
- Characterization of stromal and vascular compartments
- Spatial mapping of tumor-immune-stroma interactions

Tissue preparation:

FFPE tissue samples.

Included in the Panel:

20 BIOMARKERS				
PanCK	Collagen I	CD31	CD79a	CD57
EpCAM	Fibronectin	CD45	CD163	PD-L1
E-Cadherin	Alpha-SMA	CD3	CD11b	Lag 3
Beta-Catenin	FAP	CD	CD15	OX40



Oncology Collection

PROTEINS

TILS PANEL

Imaging Panel:

The Imaging Mass Cytometry (IMC) TILs panel characterizes the immune infiltration inside the tumor microenvironment by profiling T-cell abundance, activation, exhaustion, and cytotoxicity.

The panel captures

- Total T cell infiltration
- T-cell activation & function
- T-cell exhaustion / immunosuppression
- Tumor content

Tissue preparation:

FFPE tissue samples.

Included in the Panel:

16 BIOMARKERS			
HLAABC	CD3	HLADR	CD68
PanCK	CD56	Collagen Type I	Granzyme B
CTLA4	CD8a	Lag3	FoxP3
CD28	CD20	PD-1	CD86



AMINO ACIDS PANEL

Imaging Panel:

The Amino Acid Pathway Panel is a Mass Spectrometry Imaging (MSI) solution targeting 20 key amino acids. This panel provides spatial mapping of local amino acid metabolism in intact tissues, enabling analysis of tumor metabolic heterogeneity, metabolic vulnerabilities, and therapy response. It supports assessment of drug mechanisms of action, treatment resistance, and spatial biomarker discovery.

Tissue preparation:

Frozen tissue samples.

Included in the Panel:

20 BIOMARKERS				
Alanine	Cysteine	Histidine	Methionine	Threonine
Arginine	Glutamic acid	Isoleucine	Phenylalanine	Tryptophan
Asparagine	Glutamine	Leucine	Proline	Tyrosine
Aspartic acid	Glycine	Lysine	Serine	Valine



Oncology Collection

METABOLITES

GLYCOLYSIS PANEL

Imaging Panel:

The Glycolysis Panel is a spatial metabolomics panel enabling the detection and localization of core glycolytic intermediates across intact tumor tissue sections using mass spectrometry imaging (MSI). By capturing multiple steps of the glycolytic pathway, the panel provides a functional readout of glycolytic flux and metabolic reprogramming within solid tumors. It reveals spatial heterogeneity linked to hypoxia, tumor aggressiveness, and interactions with the tumor microenvironment. This panel supports mechanism-of-action studies, metabolic vulnerability identification, and translational oncology research, including therapeutic response and resistance analysis.

Tissue preparation:

Frozen tissue samples.

Included in the Panel:

9 BIOMARKERS		
Fructose-1,6-bisphosphate	Glyceraldehyde-3-phosphate	3-Phosphoglycerate
Fructose-6-phosphate	1,3-Bisphosphoglycerate	Hexose
Glucose-6-phosphate	2-Phosphoglycerate	Phosphoenolpyruvate



KREBS CYCLE PANEL

Imaging Panel:

The Krebs Cycle Panel is a Mass Spectrometry Imaging (MSI) solution targeting 9 key metabolites of the citric acid cycle and energy-related metabolites. This panel provides spatial mapping of local metabolic states in intact tissues, enabling analysis of tumor heterogeneity, metabolic vulnerabilities, and therapy response. It supports assessment of drug mechanisms of action and treatment resistance.

Tissue preparation:

Frozen tissue samples.

Included in the Panel:

9 BIOMARKERS		
2-oxoglutarate	Fumarate	Malate
Acetyl CoA	Isocitrate	Pyruvate
Citrate	Lactate	Succinate



ATP PATHWAY PANEL

Imaging Panel:

The ATP Pathway Panel is a Mass Spectrometry Imaging (MSI) solution targeting 5 key markers. This panel provides spatial mapping of cellular energy states within intact tissues, enabling analysis of tumor metabolic heterogeneity, energy-associated vulnerabilities, and therapy response. It supports assessment of drug mechanisms of action and treatment resistance.

Tissue preparation:

Frozen tissue samples.

Included in the Panel:

5 BIOMARKERS	
Adenosine	ATP
ADP	Inosine
AMP	



IDO1 PATHWAY PANEL

Imaging Panel:

The IDO1 Panel is a Mass Spectrometry Imaging (MSI) solution targeting key metabolites of the tryptophan-kynurenine pathway (tryptophan, kynurenine). This panel enables spatial mapping of IDO1 enzyme activity and local immunometabolic states in intact tissues, allowing analysis of tumor immune modulation, metabolic vulnerabilities, and therapy response. It supports assessment of drug mechanisms of action and treatment resistance.

Tissue preparation:

Frozen tissue samples.

Included in the Panel:

2 BIOMARKERS	
Tryptophan	
Kynurenine	



LIPIDOMICS (NEGATIVE IONIZATION) PANEL

Imaging Panel:

The Spatial Lipidomics (Negative Ionization) Panel is a spatially resolved Mass Spectrometry Imaging (MSI) based lipidomics solution, profiling 158 lipids across intact tissue sections in negative mode of ionization. It reveals localized lipid metabolic states associated with tumor heterogeneity, immune modulation, and therapeutic response. This panel supports drug mechanism-of-action assessment, resistance analysis, and spatial biomarker discovery in solid tumors.

Tissue preparation:

Frozen tissue samples.

Included in the Panel:

CLASS OF LIPIDS	NUMBER OF BIOMARKERS
Ceramides	8
Free fatty acids	15
Galactosyl Ceramides	8
Lysophosphatidic Acid and Phosphatidic Acid (LPA and PA)	30
Lysophosphatidylglycerol and Phosphatidylglycerol (LPG and PG)	30
Lysophosphatidylinositol and Phosphatidylinositol (LPI and PI)	30
Lysophosphatidylserine and Phosphatidylserine (LPS and PS)	30
Sterols	1
Sulfatides	8
Bile acids	6



LIPIDOMICS (POSITIVE IONIZATION) PANEL

Imaging Panel:

The Spatial Lipidomics (Positive Ionization) Panel is a spatially resolved Mass Spectrometry Imaging (MSI) based lipidomics solution, profiling 84 lipids across intact tissue sections in positive mode of ionization. It reveals localized lipid metabolic states associated with tumor heterogeneity, immune modulation, and therapeutic response. This panel supports drug mechanism-of-action assessment, resistance analysis, and spatial biomarker discovery in solid tumors.

Tissue preparation:

Frozen tissue samples.

Included in the Panel:

CLASS OF LIPIDS	NUMBER OF BIOMARKERS
Acyl carnitines	15
Lysophosphatidylcholine and Phosphatidylcholine (LPC and PC)	30
Lysophosphatidylethanolamine and Phosphatidylethanolamine (LPE and PE)	30
Sphingomyelin	8
Sterols	1



TUMOR SIGNALING 360 PANEL

Human Fluids, Solid Tissue Homogenates, and Cell Suspension Panel:

The Tumor Signaling 360™ Panel is a targeted nCounter gene expression panel measuring approximately 750–800 genes. It profiles key oncogenic, immune, and tumor microenvironment pathways using bulk transcriptomic analysis, supporting biomarker discovery, pathway analysis, and translational oncology research.

Tissue preparation:

Pathway activity is measured from bulk gene expression profiles generated from the input sample. Compatible with RNA from both FFPE-derived samples and frozen tissue.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Tumor proliferation and cell cycle regulation	120-150
Oncogenic signaling pathways (MAPK, PI3K/AKT, WNT, MYC)	150-180
DNA damage response and repair	60-80
Cell stress and apoptosis	60-80
Metabolism and hypoxia-related pathways	50-70
Tumor-immune interactions	80-100
Immune activation and immune suppression	100-120
Cytokine and chemokine signaling	70-90
Angiogenesis and vascular biology	40-60
Stromal and extracellular matrix biology	50-70
EMT, invasion, and metastasis	40-60



CAR-T CHARACTERIZATION PANEL

Human Fluids, Solid Tissue Homogenates, and Cell Suspension Panel:

The CAR-T Characterization Panel is a targeted nCounter gene expression panel measuring approximately 750–800 genes associated with T-cell identity, activation, cytotoxic function, exhaustion, memory differentiation, and cytokine signaling. It supports CAR-T product characterization, mechanism-of-action studies, and translational immunotherapy research.

Tissue preparation:

Pathway activity is measured from bulk gene expression profiles generated from the input sample. Compatible with RNA from both FFPE-derived samples and frozen tissue.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
T-cell identity and lineage markers	80-100
T-cell activation and signaling	120-150
Cytotoxic effector function (e.g. killing machinery)	80-100
Cytokine and chemokine signaling	100-120
T-cell exhaustion and dysfunction	60-80
Memory differentiation and persistence	60-80
Proliferation and cell cycle regulation	60-70
Metabolic and stress response pathways	40-60
Immune regulation and checkpoint pathways	50-70
Trafficking, homing, and migration	40-60



PAN-CANCER IMMUNE PROFILING PANEL

Human Fluids, Solid Tissue Homogenates, and Cell Suspension Panel:

The Pan-Cancer Immune Profiling Panel is a targeted nCounter gene expression panel measuring approximately 750–800 immune-related genes. It is designed to comprehensively profile immune cell types, immune activation and suppression, cytokine signaling, antigen presentation, and tumor-immune interactions using bulk transcriptomic analysis, supporting immuno-oncology research, biomarker discovery, and patient stratification.

Tissue preparation:

Pathway activity is measured from bulk gene expression profiles generated from the input sample. Compatible with RNA from both FFPE-derived samples and frozen tissue.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Immune cell type identification and lineage markers	120-150
Innate immune activation (myeloid, NK, complement)	90-120
Adaptive immune activation (T-cell, B-cell signaling)	120-150
Cytokine and chemokine signaling	100-120
Immune regulation and checkpoint pathway	80-100
Antigen processing and presentation	60-80
Inflammation and interferon signaling	70-90
Tumor-immune interaction pathways	80-100
Immune cell trafficking and migration	50-70
Stress response and immune modulation	40-60



PAN-CANCER PATHWAYS PANEL

Human Fluids, Solid Tissue Homogenates, and Cell Suspension Panel:

The PanCancer Pathways Panel is a targeted nCounter gene expression panel measuring approximately 770 genes representing the core biological pathways that drive cancer development and progression. Using bulk transcriptomic profiling, it enables pathway-level analysis of tumor-intrinsic signaling and cancer biology across diverse tumor types.

Tissue preparation:

Pathway activity is measured from bulk gene expression profiles generated from the input sample. Compatible with RNA from both FFPE-derived samples and frozen tissue.

Included in the Panel:

BIOLOGICAL PATHWAY	NUMBER OF BIOMARKERS
Cell cycle and proliferation	90-110
Apoptosis and cell survival	70-90
DNA damage response and repair	60-80
Chromatin modification and epigenetic regulation	60-80
Transcriptional regulation	70-90
PI3K/AKT signaling	60-80
MAPK signaling	60-80
WNT signaling	50-70
TGF- β signaling	50-70
Notch signaling	40-60

