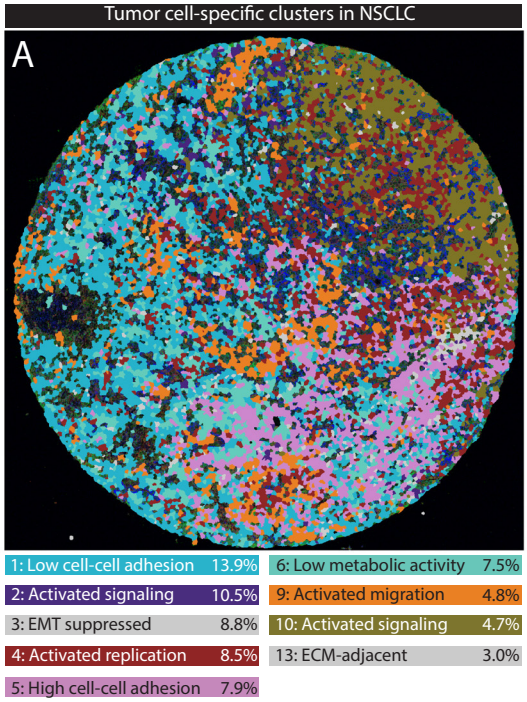
Accelerate your translational research with standardized Mouse Immuno-Oncology IMC Panel Kits

Standardized panel kits so you can get to data quicker

Promising cancer therapeutics often fail in clinical trials due to lack of holistic data about their precise effect on tumors[1]. The Maxpar® OnDemand™ Mouse Immuno-Oncology IMC™ Panel Kit enables researchers to quickly develop a deep understanding of the tumor microenvironment, allowing them to make decisions about their therapeutic drug targets with confidence.



Make high-confidence decisions about therapeutic drug targets for further clinical evaluation.

Out-of-the-box success – Get rapid results using these carefully curated kits that include preselected targets, clones and metal tags to get you up and running quickly.

Consistent and reliable – Standardized ready-to-go panels make it easier to collaborate with groups or sites by sharing deeply informative data that can be readily replicated.

Superior data quality – Overcome the limitations resulting from autofluorescence and high background with cyclic immunofluorescence by using Imaging Mass Cytometry™ (IMC), based on proven CyTOF® technology.

The best choice for a fast and easy start

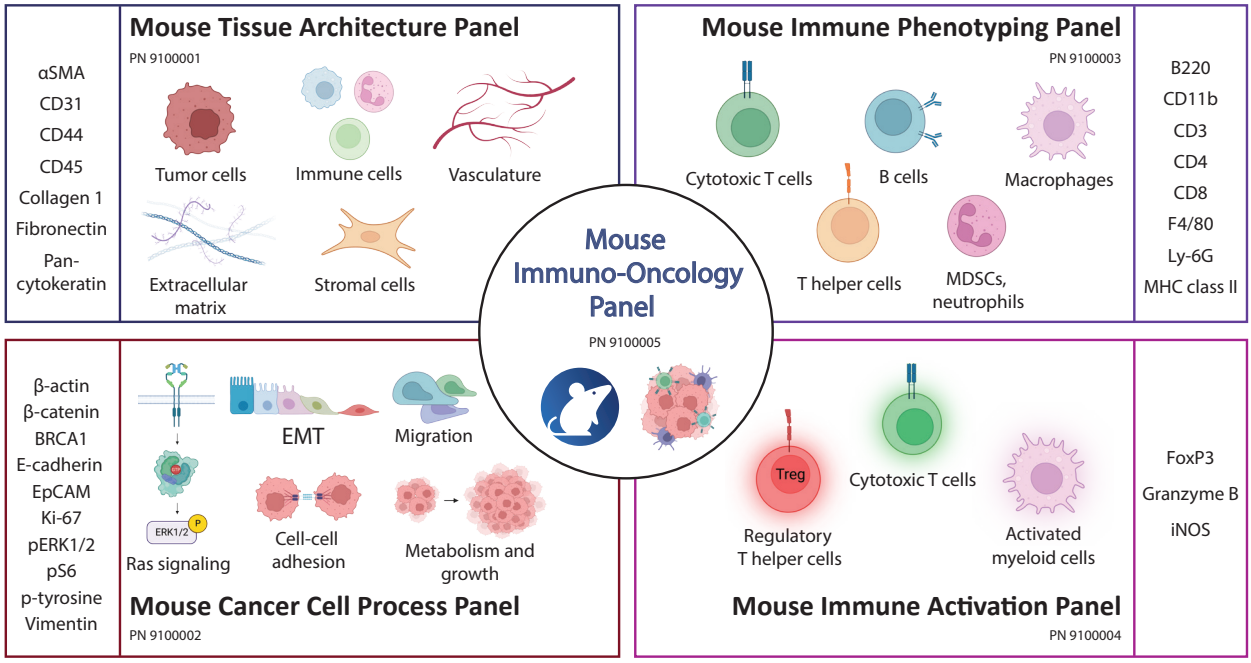
This 28-plex Mouse Immuno-Oncology Panel consists of four modules that can be used together or separately to allow for optimal study design. Open channels are available to easily add antibodies if needed. You'll save development time and money with these preselected, verified panels.

Mix and match for optimal study design

Each kit is available separately and, unlike most other high-plex panels, they are modular and specifically designed to work together.

Identify tumor cells, immune cells, vasculature, smooth muscle cells and components of the extracellular matrix.

Perform phenotyping of key immune cells including helper and cytotoxic T cells, B cells, macrophages and other antigen-presenting cells.



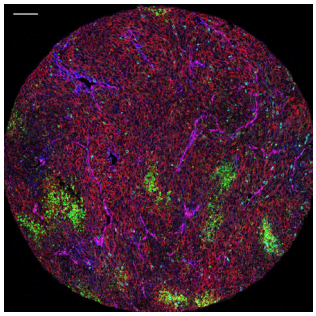
Assess metabolism and biomarkers of epithelial-to-mesenchymal transition in cancer cells.

Identify the activation state of lymphoid and myeloid cells including immune cell proliferation and cytotoxic T cell activation.

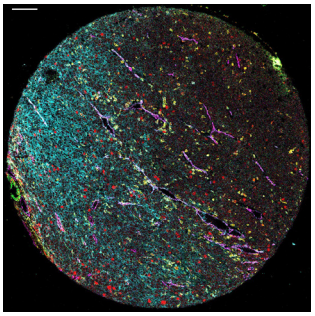
Graphic created using biorender.com.

Get high-clarity data even with challenging tissues

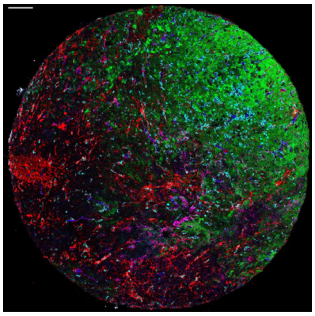
Autofluorescence, high background and time-consuming cyclic staining protocols with the potential to degrade tissue make it difficult to have confidence in your results. With IMC, get quantitative, repeatable and high-quality data without the need for excessive manipulation, even when working with tissues that exhibit high autofluorescence, such as lung, brain and colon.



Mouse colon adenocarcinoma



Mouse glioblastoma



Mouse non-small-cell lung carcinoma

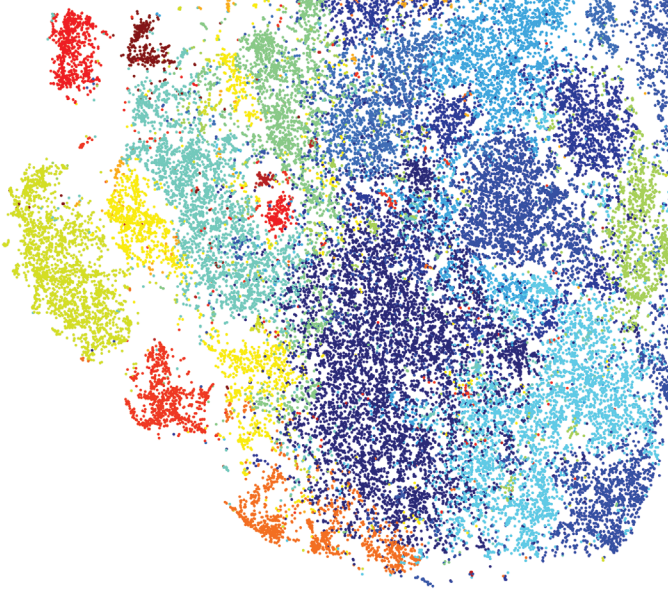
Avoid autofluorescence and get right to results.

Panel ordering information

Products		Metal	Marker	Clone	Target/Cellular Process
Maxpar® OnDemand™ Mouse Immuno-Oncology IMC™ Panel Kit (PN 9100005)	Maxpar OnDemand Mouse Tissue Architecture IMC Panel Kit (PN 9100001)	^{141}Pr	αSMA	1A4	Smooth muscle/stromal cells
		^{171}Yb	CD31	EPR17259	Vascular cells
		^{153}Eu	CD44	IM7	Tumor cell/immune cells
		^{151}Eu	CD45	D3F8Q	Immune cells
		^{173}Yb	Collagen 1	Goat polyclonal	Extracellular matrix/stromal cells
		^{152}Sm	Fibronectin	EPR19241-46	Extracellular matrix/stromal cells
		^{174}Yb	Pan-cytokeratin	AE-1/AE-3	Tumor cells
	Maxpar OnDemand Mouse Cancer Cell Process IMC Panel Kit (PN 9100002)	^{154}Sm	β-actin	2F1-1	Cytoskeletal microfilament
		^{169}Tm	β-catenin	5H10	Ca^{2+} dependent cell adhesion
		^{172}Yb	BRCA1	MS110	Tumor suppressor
		^{158}Gd	E-cadherin	24E10	Ca^{2+} dependent cell adhesion
		^{147}Sm	EpCAM	EPR20532-222	Ca^{2+} independent cell adhesion
		^{150}Nd	Ki-67	B56	Proliferating cells
		^{164}Dy	pERK1/2	D13.14.4E	RAS signaling pathway activation
		^{175}Lu	pS6[S235/S236]	N7-548	mTOR pathway activation
		^{144}Nd	p-tyrosine	P-Tyr-100	Receptor tyrosine kinase activation
		^{149}Sm	Vimentin	D21H3	Mesenchymal cells
	Maxpar OnDemand Mouse Immune Phenotyping IMC Panel Kit (PN 9100003)	^{176}Yb	B220	RA36B2	B cells
		^{163}Dy	CD11b	EPR1344	MDSCs, M1 macrophages
		^{170}Er	CD3	Polyclonal (C-terminal)	Pan T cells
		^{159}Tb	CD4	BLR16J	T helper cells
		^{162}Dy	CD8	EPR21769	Killer T cells
		^{156}Gd	F4/80	D2S9R	Macrophages
		^{166}Er	Ly-6G	1A8	MDSCs, neutrophils
		^{161}Dy	MHC class II	M5/114.15.2	Antigen presenting cells
	Maxpar OnDemand Mouse Immune Activation IMC Panel Kit (PN 9100004)	^{165}Ho	FoxP3	FJK-16s	Regulatory T cells
		^{155}Gd	Granzyme B	EPR22645-206	Cytotoxic immune cell activation
		^{160}Gd	iNOS	SP126	Activated macrophages

Related products

For best results with these panels we recommend using the Maxpar IMC Cell Segmentation Kit (PN 201500) and Cell-ID™ Intercalator-Ir (PN 201192A). The immuno-oncology panels kits are designed so you can add the three cell segmentation markers to successfully segment and more easily identify the spatial localization of distinct tumor and immune cell subtypes.



Learn how to accelerate your mouse translational research.
Download the application note at **standardbio.com/mouseimcpanels**

Reference

1. Ludwig, J.A. and Weinstein, J.N. "Biomarkers in cancer staging, prognosis and treatment selection." *Nature Reviews Cancer* 5 (2005): 845–856.

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