

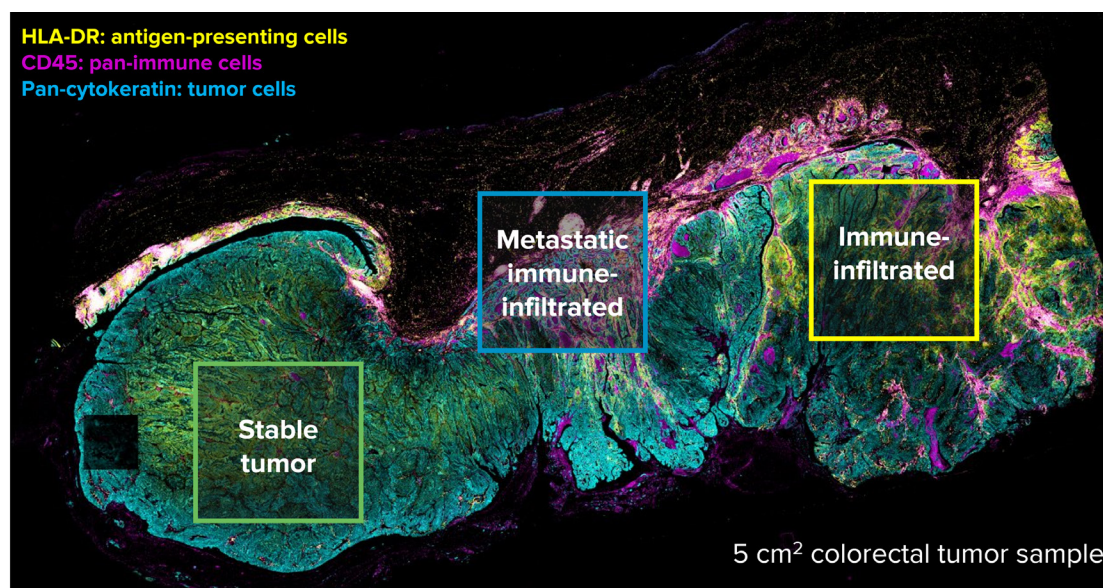
HUMAN IMMUNO-ONCOLOGY IMC PANELS

Your Research, Your Way – Modular Panels for Targeted Spatial Discovery

Quickly understand the tissue environment with modular Imaging Mass Cytometry™ (IMC™) panels that make study design simple, fast and highly flexible.

Tailor marker selection to your specific biological pathway or research question by choosing from a suite of **14 carefully curated IMC panels**. Analyze 40-plus targets in a single experiment to uncover tumor-immune interactions, map localized functional responses and characterize cell features – revealing spatial biomarkers essential for understanding disease progression and immune response.

Build the panel that answers *your* research questions



Tissue architecture

Immune cell
phenotyping

Stromal cell

Epithelial and
mesenchymal

Cell function

T cell exhaustion

Cell signaling
pathways

Metabolic activity

Neurophenotyping

A 5 cm² colorectal cancer tumor sample was imaged on the Hyperion™ XT Imaging System with whole slide imaging modes. Stable tumor areas, areas with metastasis and immune infiltration can be identified. Detection of metastatic tumor cells is a negative prognostic factor for patients. This information has the potential to inform treatment therapies to inhibit the migratory capabilities of the tumor cells to prevent metastatic dissemination.

Highlights

- **Rapid high-plex panel design** with ready-made panels that fit together
- **Carefully curated targets** to capture meaningful insights
- **Visualize dynamic range of 40-plus markers** simultaneously with IMC technology

High plexity without
the complexity

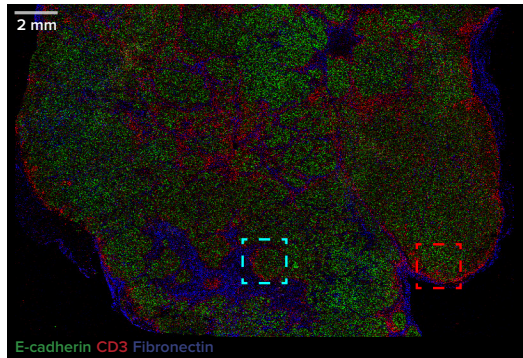
Capture heterogeneity across **10-plus cancer types** including lung, colon, skin, glioblastoma, breast, liver and others.

Solid tumor

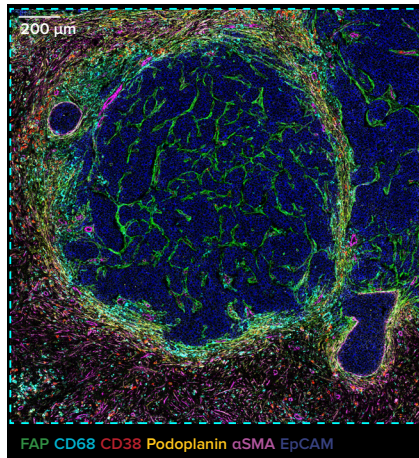
Uncover immuno-oncological processes in solid tumors.

Panels used: **Human Immuno-Oncology IMC Panel, 31 Antibodies**

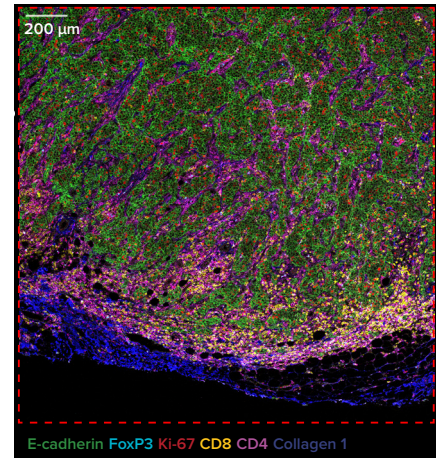
Human Immune Cell Expansion IMC Panel, 7 Antibodies



Easily interpret heterogeneity at the whole-tissue level.



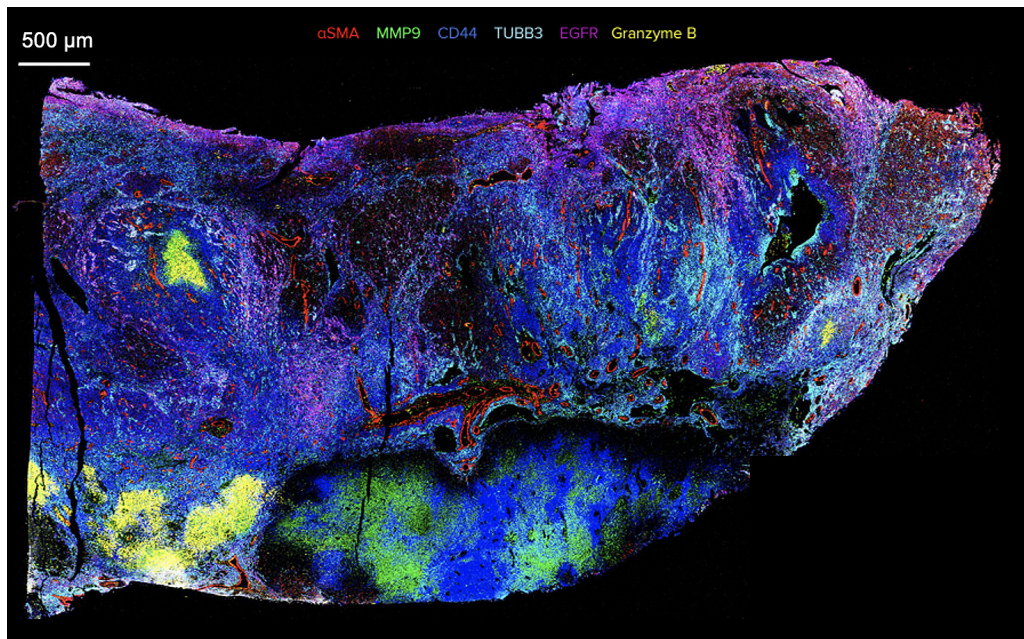
Reveal distinct regions at the single-cell level.



Neuro-oncology

Target neuronal-specific markers in human gliomas.

Panels used: **Glioblastoma** | **Neuro Expansion** | **Stromal Cell** | **Lymphoid** | **Myeloid** | **Basic Immune**



Reveal spatial complexity in heterogeneous brain tissue.

Visualize **40-plus distinct protein markers** simultaneously without tissue degradation and autofluorescence artifacts usually observed in brain tissue.

Your research. Your panel.

Every research question is unique – so generate the insights that matter to you. **Mix and match** these panels to align with your specific biological question and research goal.



Human immuno-oncology

Tissue Architecture	Cell Functional State	Stromal Cell	Basic Immune	Lymphoid	Myeloid	Epithelial and Mesenchymal
Vasculature, epithelial cells, extracellular matrix CD31, collagen 1, fibronectin, pan-cytokeratin	Cell proliferation, T cell exhaustion, regulatory T cells PD-L1, PD-1, FoxP3, granzyme B, Ki-67	Smooth muscle cells, stem cell-like tumor cells, lymphatic endothelium, activated fibroblasts alpha-smooth muscle actin, CD44, FAP, podoplanin	Key lymphoid and myeloid cell subtypes CD3ε, CD45, CD20, CD68	Immune cell infiltrates in tumors CD4, CD8a, CD45RO, CD57	Monocytes, granulocytes, macrophages and dendritic cells CD11b, CD11c, CD14, CD66b, CD163, HLA-DR	Cancer cell signaling and metastasis β-catenin, E-cadherin, EpCAM, vimentin



Functional profiling

Immune Cell Expansion	T Cell Exhaustion	Cell Metabolism	Cell Signaling
CD7, CD15, CD16, CD38, CD206, iNOS, MPO	TIM-3, IDO, LAG-3, OX40, CTLA-4	GLUT1, citrate synthase, ATP5A, CPT1A, LDHA, p4E-BP1, pS6	EGFR, pSMAD, GSK3β, p-tyrosine, YAP1, pMAPK, PTEN



Neuro-oncology

Neuro Phenotyping	Neuro Expansion	Glioblastoma
Iba1, GFAP, NeuN, S100β, MAP2, CD34, Olig2	TMEM119, beta-III tubulin, synaptophysin	SOX2, MMP9, nestin, EGFR, vimentin

Seamlessly build your panel with our **compatibility guide**

Panel ordering information

Product	Part Number
Human Immuno-Oncology IMC Panel, 31 Antibodies	201509
Human Tissue Architecture IMC Panel, 4 Antibodies	201510
Human Stromal Cell IMC Panel, 4 Antibodies	201511
Human Lymphoid IMC Panel, 4 Antibodies	201512
Human Myeloid IMC Panel, 6 Antibodies	201513
Human Cell Functional State IMC Panel, 5 Antibodies	201514
Human Epithelial and Mesenchymal IMC Panel, 4 Antibodies	201515
Human Basic Immune IMC Panel, 4 Antibodies	201518

Compatible products

Product	Part Number
Cell-ID™ Intercalator-Ir	201192B
Maxpar™ IMC Cell Segmentation Kit	201500
Maxpar Neuro Phenotyping IMC Panel Kit	201337
Human Neuro Expansion IMC Panel, 3 Antibodies*	9100012
Glioblastoma IMC Panel, 5 Antibodies*	9100011
Human Immune Cell Expansion IMC Panel, 7 Antibodies	201516
Human T Cell Exhaustion IMC Panel, 5 Antibodies	201519
Human Cell Metabolism IMC Panel, 7 Antibodies	201521
Human Cell Signaling IMC Panel, 7 Antibodies	201522

* Not compatible with all seven subpanels of the Human Immuno-Oncology IMC Panel. Check [panel compatibility guide](#) to view panel configurations.



Standard BioTools™ Services Lab

Don't have access to a Hyperion™ Imaging System? Simply ship your samples and get results within 72 hours of sample receipt.

For more information, visit
standardbio.com/immuno-oncology-imc



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Human Immuno-Oncology IMC Panels Flyer

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