

Hyperion™



Building Imaging Mass Cytometry Modular Panels



Modular Imaging Mass Cytometry panels

Effortlessly build panels with modular Imaging Mass Cytometry™ (IMC™) panels, designed for seamless compatibility. Use this guide to visualize the panels as building blocks and design a high-parameter panel tailored to your research needs, with the flexibility to add custom targets.



[See human panels](#)



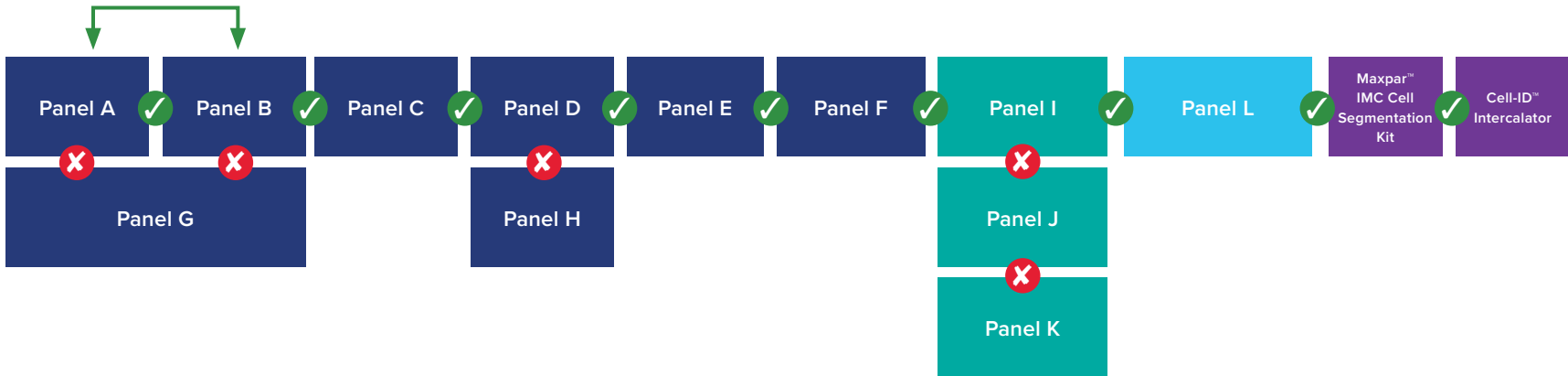
[See mouse panels](#)

How to build highly multiplexed panels



✓ Panels that are horizontally adjacent are compatible.

✗ Panels that are vertically stacked are not compatible.



Create your panel directly in your browser with [Maxpar Panel Designer v2.0.1](#).

Easily tackle **high-plex studies**

High-plex panel: Examples of research area-specific panels

Explore examples of 30-plus-parameter panels crafted from modular IMC panels, designed for specific research objectives and applications. Discover their usage in the corresponding application notes to see how they effectively reveal tissue heterogeneity and immunological processes.



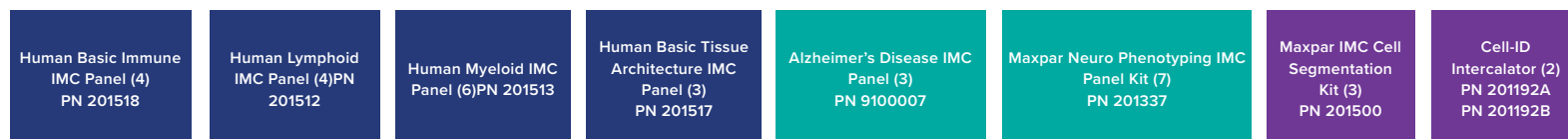
Human immuno-oncology



App Note: Reveal Heterogeneity of Tumors with Whole Slide Imaging



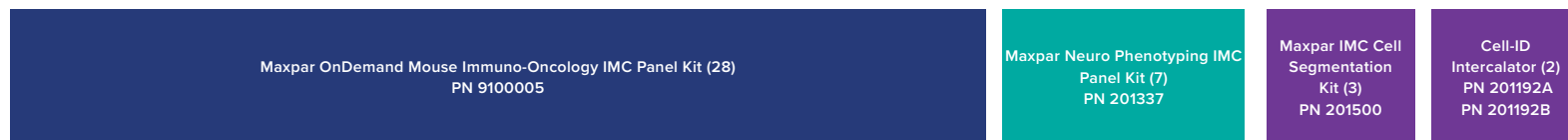
Immune cell infiltration in Alzheimer's disease



App Note: Exploring Neurodegenerative Diseases with Imaging Mass Cytometry



Immuno-oncological processes within the mouse brain tumor microenvironment



App Note: Unravel the Complexity of Mouse Brain Tumors

Legend

- Immune profiling panels
- Functional profiling panels
- Neurophenotyping panels
- Nuclei staining and cell segmentation

[See panel contents here](#)



Human immuno-oncology studies

Quickly apply spatial context to your immuno-oncology research by combining ready-made modular IHC panels that cover a breadth of immune profiling and functional targets. Start with the Human Immuno-Oncology IHC Panel, 31 Antibodies and add on compatible panels to further characterize tumor and immune cell subtypes.

Build a panel from left to right



✓ Panels that are horizontally adjacent are compatible.

✗ Panels that are vertically stacked or that overlap are not compatible.

Legend

- Immune profiling panels
- Functional profiling panels
- Nuclei staining and cell segmentation

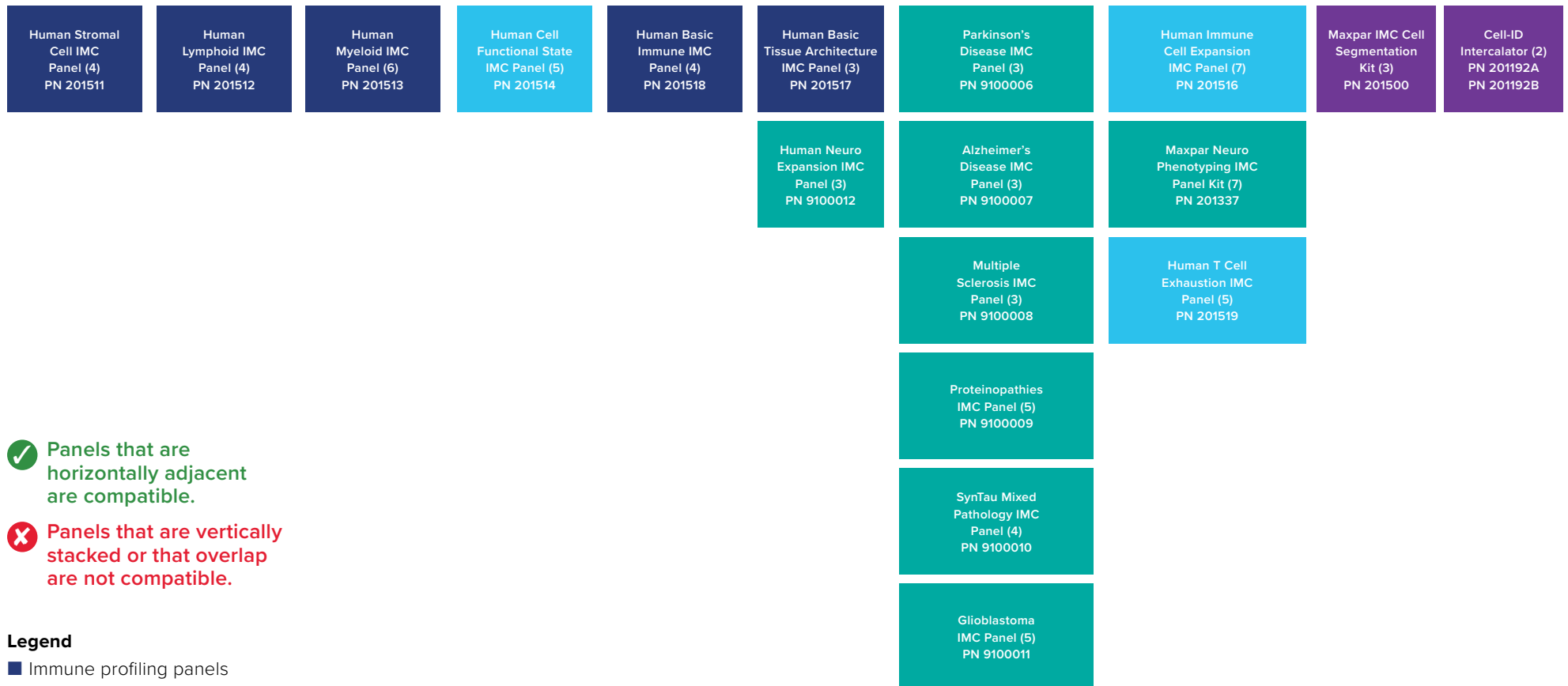
[See panel contents here](#)

Neurodegenerative or neuro-oncology research



Leverage spatial cell phenotyping with IMC technology for high-quality neurological and immunological insights. Analyze over 40 proteins simultaneously in neoplastic or neurodegenerative tissues without interference from autofluorescence usually observed in brain tissue.

Build a panel from left to right



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- ✗ Panels that are vertically stacked or that overlap are not compatible.

Legend

- Immune profiling panels
- Functional profiling panels
- Neurophenotyping panels
- Nuclei staining and cell segmentation

[See panel contents here](#)



Mouse immuno-oncology and neurology studies

Use the Maxpar OnDemand Mouse Immuno-Oncology IMC Panel Kit to evaluate critical pathophysiological parameters of the mouse tumor microenvironment. Combine the kit or its four modular subpanels with the Maxpar Neuro Phenotyping IMC Panel Kit for comprehensive brain tumor characterization and assessment of neuronal inflammation, activation and development.

Build a panel from left to right



- * Parkinson's Disease IMC Panel (3) PN 9100006
- * Alzheimer's Disease IMC Panel (3) PN 9100007
- Multiple Sclerosis IMC Panel (3) PN 9100008
- * Proteinopathies IMC Panel (5) PN 9100009
- * SynTau Mixed Pathology IMC Panel (4) PN 9100010
- Glioblastoma IMC Panel (5) PN 9100011

✓ Panels that are horizontally adjacent are compatible.

✗ Panels that are vertically stacked or that overlap are not compatible.

Legend

- Immune profiling panels
- Functional profiling panels
- Neurophenotyping panels
- Nuclei staining and cell segmentation

* Panel contains one or more antibodies that recognize human epitope(s) but can be applied to mouse models that exogenously express these targets.

[See panel contents here](#)

Panel ordering information

Product	Targets	Metal
<u>Human Immuno-Oncology IMC Panel, 31 Antibodies (201509)</u>		
Human Tissue Architecture IMC Panel, 4 Antibodies (201510)	CD31	151Eu
	Collagen 1	89Y
	Fibronectin	171Yb
	Pan-cytokeratin	141Pr
Human Stromal Cell IMC Panel, 4 Antibodies (201511)	αSMA	209Bi
	CD44	153Eu
	FAP	161Dy
Human Lymphoid IMC Panel, 4 Antibodies (201512)	Podoplanin	164Dy
	CD4	156Gd
	CD8a	162Dy
	CD45RO	173Yb
	CD57	163Dy
Human Myeloid IMC Panel, 6 Antibodies (201513)	CD11b	144Nd
	CD11c	154Sm
	CD14	175Lu
	CD66b	160Gd
	CD163	147Sm
	HLA-DR	174Yb
Human Cell Functional State IMC Panel, 5 Antibodies (201514)	PD-L1	166Er
	PD-1	165Ho
	FoxP3	155Gd
	Granzyme B	176Yb
Human Epithelial and Mesenchymal IMC Panel, 4 Antibodies (201515)	Ki-67	150Nd
	β-catenin	169Tm
	E-cadherin	158Gd
	EpCAM	172Yb
Human Basic Immune IMC Panel, 4 Antibodies (201518)	Vimentin	149Sm
	CD3ε	170Er
	CD20	115In
	CD45	152Sm
	CD68	159Tb

Product	Targets	Metal
<u>Human Immune Cell Expansion IMC Panel, 7 Antibodies (201516)</u>	CD7	143Nd
	CD15	145Nd
	CD16	146Nd
	CD38	142Nd
	CD206	167Er
	iNOS	168Er
	MPO	148Nd
<u>Human Basic Tissue Architecture IMC Panel, 3 Antibodies (201517)</u>	Collagen 1	89Y
	Fibronectin	171Yb
	CD31/PECAM-1	151Eu
<u>Human T Cell Exhaustion IMC Panel, 5 Antibodies (201519)</u>	TIM-3	142Nd
	IDO	145Nd
	LAG-3	148Nd
	OX40	167Er
	CTLA-4	168Er
<u>Maxpar Neuro Phenotyping IMC Panel Kit (201337)*</u>	Iba1	142Nd
	GFAP	143Nd
	NeuN	145Nd
	S100β	146Nd
	MAP2	148Nd
	CD34	167Er
	Olig2	168Er

* Panel contains antibodies reactive to both human and mouse epitopes.

Product	Targets	Metal
<u>Parkinson's Disease IMC Panel, 3 Antibodies (9100006)*</u>	αSynuclein (αSyn)	141Pr
	Phosphorylated αSynuclein (p-αSyn) S129	169Tm
	Tyrosine hydroxylase (TH)	172Yb
<u>Alzheimer's Disease IMC Panel, 3 Antibodies (9100007)*</u>	Tau	149Sm
	Phosphorylated Tau (pTau) S202/T205	172Yb
	Amyloid precursor protein (APP)	141Pr
<u>Multiple Sclerosis IMC Panel, 3 Antibodies (9100008)</u>	Myelin basic protein (MBP)	149Sm
	Myelin oligodendrocyte glycoprotein (MOG)	158Gd
	Pan-axonal neurofilament (NF) protein	141Pr
<u>Proteinopathies IMC Panel, 5 Antibodies (9100009)*</u>	αSyn	158Gd
	p-αSyn	169Tm
	Tau	149Sm
	pTau	172Yb
	APP	141Pr
<u>SynTau Mixed Pathology IMC Panel, 4 Antibodies (9100010)*</u>	αSyn	158Gd
	p-αSyn	169Tm
	Tau	149Sm
	pTau	172Yb
<u>Glioblastoma IMC Panel, 5 Antibodies (9100011)*</u>	EGFR	172Yb
	Nestin	141Pr
	MMP9	158Gd
	SOX2	169Tm
<u>Human Neuro Expansion IMC Panel, 3 Antibodies (9100012)</u>	Vimentin	149Sm
	Synaptophysin	151Eu
	B III Tubulin	89Y
	TMEM119	171Yb

* Panel contains one or more antibodies that recognize human epitope(s) but can be applied to mouse models that exogenously express these targets.

Panel ordering information

Product	Targets	Metal
<u>Maxpar OnDemand Mouse Immuno-Oncology IMC Panel Kit (9100005)</u>		
	αSMA	141Pr
	CD31	171Yb
Maxpar OnDemand Mouse Tissue Architecture IMC Panel Kit (9100001)	CD44	153Eu
	CD45	151Eu
	Collagen 1	173Yb
	Fibronectin	152Sm
	Pan-cytokeratin	174Yb
		β-actin
Maxpar OnDemand Mouse Cancer Cell Process IMC Panel Kit (9100002)	β-catenin	169Tm
	BRCA1	172Yb
	E-cadherin	158Gd
	EpCAM	147Sm
	Ki-67	150Nd
	pERK1/2	164Dy
	pS6	175Lu
	p-tyrosine	144Nd
	Vimentin	149Sm
		B220
Maxpar OnDemand Mouse Immune Phenotyping IMC Panel Kit (9100003)	CD3	170Er
	CD4	159Tb
	CD8	162Dy
	CD11b	163Dy
	F4/80	156Gd
	Ly-6G	166Er
	MHC class II	161Dy
Maxpar OnDemand Mouse Immune Activation IMC Panel Kit (9100004)	FoxP3	165Ho
	Granzyme B	155Gd
	iNOS	160Gd

Product	Targets	Metal
<u>Maxpar IMC Cell Segmentation Kit (201500)</u>	ICSK1	195Pt
	ICSK2	196Pt
	ICSK3	198Pt
<u>Cell-ID Intercalator-Ir (201192A or 201192B)</u>	Nucleic acid intercalator	191Ir
	Nucleic acid intercalator	193Ir

Explore at standardbio.com/resources/panel-design



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