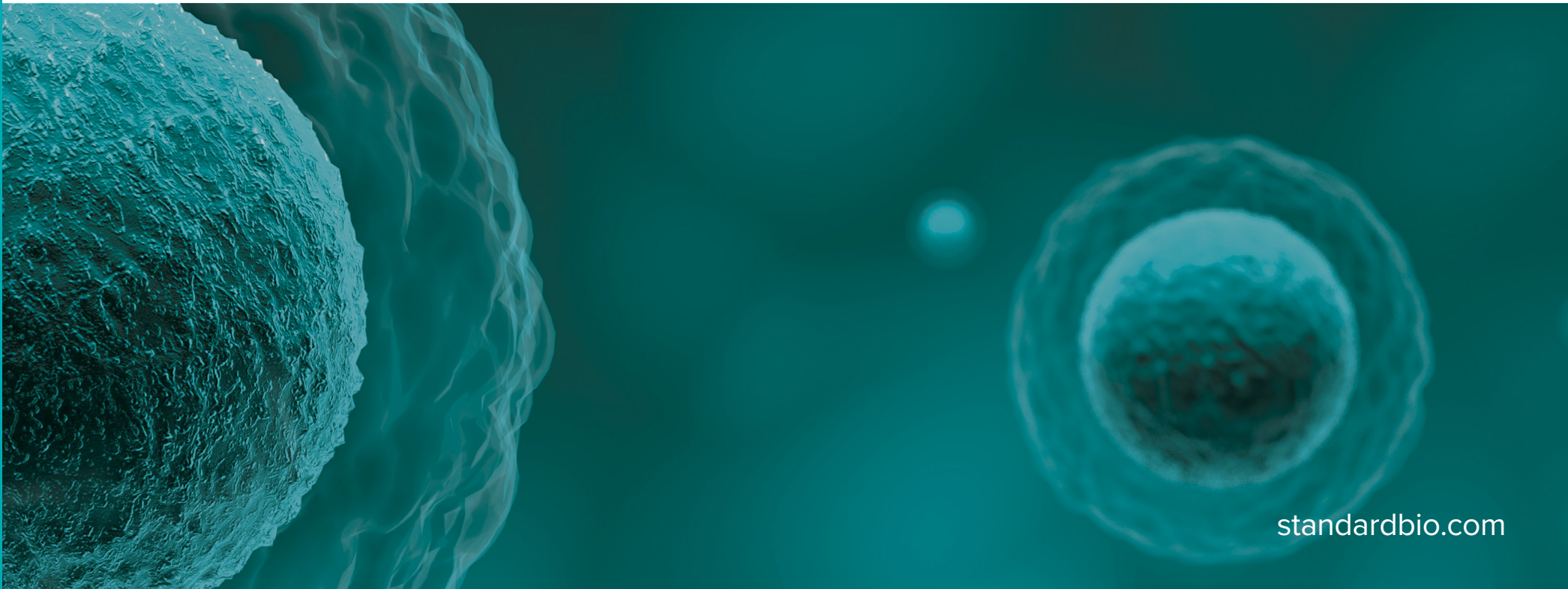


Building Modular CyTOF Panels





Modular CyTOF Panels

Effortlessly build panels with mass cytometry (CyTOF™) 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](#)



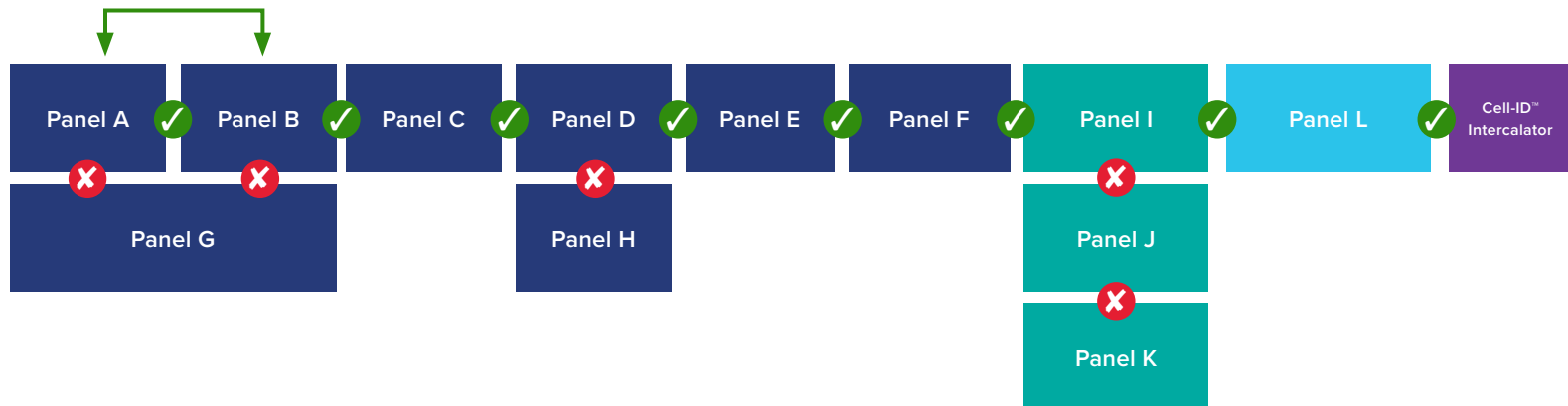
[See mouse panels](#)

How to build highly multiplexed panels

Build a panel from left to right

✓ Panels that are horizontally adjacent are compatible.

✗ Panels that are vertically stacked are not compatible.



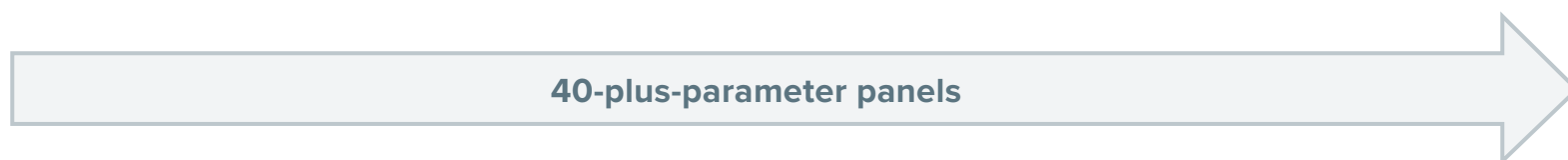
Create your panel directly in your browser with [Maxpar™ Panel Designer v2.0.1](#).

Easily tackle
high-plex studies

Your Research. Your Panel.

Examples of research area-specific panels

Explore 40-plus-parameter panels crafted from modular CyTOF panels that can be mixed and matched to support specific research goals and applications. Easily scale to high-parameter configurations and incorporate cell barcoding for efficient sample multiplexing.



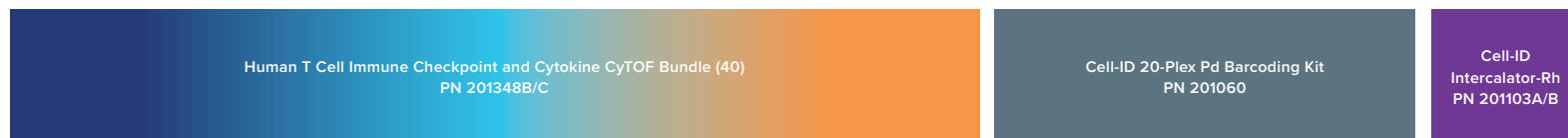
Human T cell immunology



App Note: Maxpar Direct Immune Profiling Assay Expanded to Explore Antigen-Specific Immune Responses



Human immune
functional diversity
in immuno-oncology
applications



App Note: Accelerating Immuno-Oncology Research by Profiling Cell Function with Flex-Fit™ CyTOF Panels



Mouse immune landscape



App Note: Simplifying Mouse Immune Profiling

Legend

- Immune profiling
- Immune checkpoints
- Intracellular cytokines or cytotoxicity markers
- Cell barcodes
- Cell viability

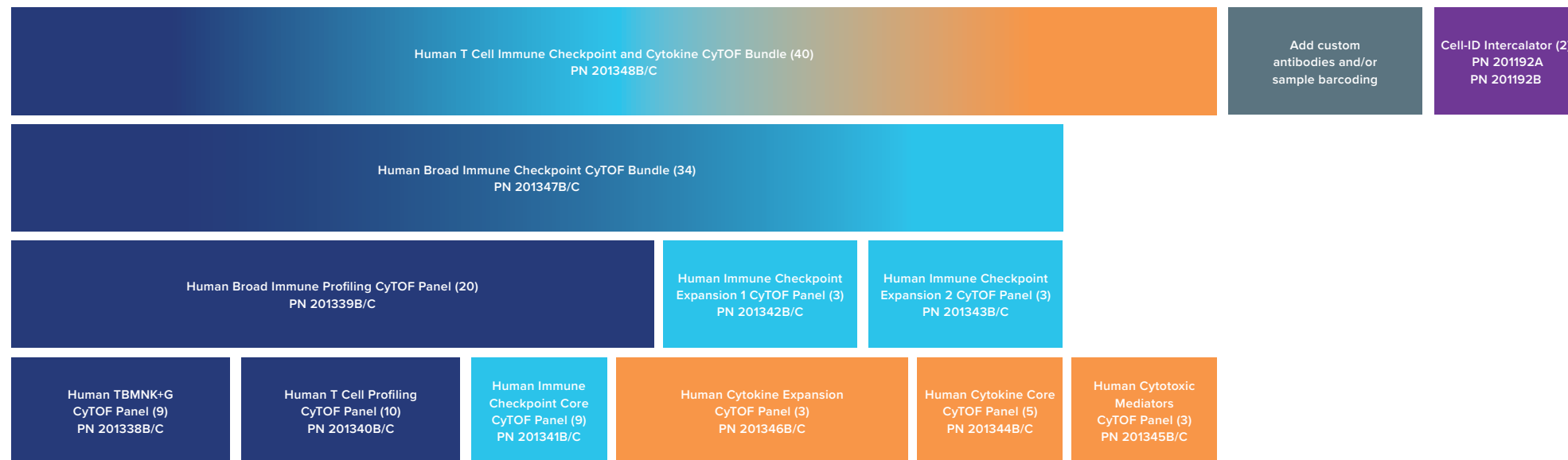
[See panel contents here](#)

Human Flex-Fit CyTOF Panels



Capture the complexity of functional biology with Flex-Fit CyTOF Panels, pre-optimized for comprehensive analysis across a wide range of lineages, activation markers, immune checkpoint markers and cytokines. Streamline study design and reduce optimization time with these modular panels, enabling efficient profiling of immune cell type and function to uncover biomarkers of immune potency and inflammatory response.

Build a panel from left to right



Legend

- Immune profiling
- Immune checkpoints
- Intracellular cytokines or cytotoxicity markers
- Cell barcodes
- Cell viability

✓ Panels that are horizontally adjacent are compatible.

✗ Panels that are vertically stacked are not compatible.

[See panel contents here](#)

Human Maxpar Direct CyTOF Panels



The Maxpar Direct Immune Profiling Assay is a dry-format, ready-to-go, validated 30-marker antibody panel for whole blood or PBMC human samples. With 18 open channels for panel expansion, the Maxpar Direct Immune Profiling Assay can be customized with individual targets, surface barcodes or Expansion Panels to address a variety of research applications.

Build a panel from left to right

Maxpar Direct Immune Profiling Assay (30)
PN 201334

Maxpar Direct Myeloid and
B Cell Expansion Panel 1 (7)
PN 201402

Add custom antibodies
and/or sample barcoding

Cell-ID
Intercalator (2)
PN 201192A
PN 201192B

Maxpar Direct Myeloid and
B Cell Expansion Panel 2 (7)
PN 201403

Maxpar Direct NK Cell
Expansion Panel 1 (7)
PN 201404

Maxpar Direct T Cell
Expansion Panel 1 (6)
PN 201405

Maxpar Direct T Cell
Expansion Panel 3 (7)
PN 201407

Maxpar Direct Basic Activation
Expansion Panel (6)
PN 201408

Maxpar Direct T Cell Activation
Expansion Panel (11)
PN 201409

Maxpar Direct Myeloid and Lymphoid
Activation Expansion Panel (10)
PN 201410

Legend

- Immune profiling
- Intracellular cytokines or cytotoxicity markers
- Cell barcodes
- Cell viability

✓ Panels that are horizontally
adjacent are compatible.

✗ Panels that are vertically
stacked are not compatible.

[See panel contents here](#)



Mouse Maxpar CyTOF Panels

The Maxpar OnDemand Mouse Immune Profiling Panel Kit is designed to provide an efficient and comprehensive immune profiling solution for mouse studies. Use other available panel kits for mouse samples to target specific applications, such as analyzing the cell cycle and signaling pathways or identifying phenotypic and functional markers associated with specific cell types.

Build a panel from left to right

Maxpar OnDemand Mouse Immune Profiling Panel Kit (33)
PN 9200001

Add custom antibodies
and/or sample barcoding

Cell-ID
Intercalator (2)
PN 201192A
PN 201192B

Maxpar Mouse Intracellular Cytokine I Panel Kit (8)
PN 201310

Maxpar Mouse Sp/LN
Basic Phenotyping Panel Kit (6)
PN 201303

Maxpar Cell Cycle Panel Kit (5)
PN 201313

Maxpar Mouse Sp/LN
Phenotyping Panel Kit (16)
PN 201306

Maxpar Signaling I Panel Kit (7)
PN 201309

Legend

- Immune profiling
- Functional profiling
- Spleen and lymph node phenotyping
- Cell cycle status
- Cell barcodes
- Cell viability

[See panel contents here](#)

Panel Ordering Information

Product	Targets	Metal
<u>Human T Cell Immune Checkpoint and Cytokine CyTOF Bundle, 40 Antibodies (PN 201348)</u>		
Human TBMNK+G CyTOF Panel, 9 Antibodies (PN 201338)	CD45	89Y
	CD8a	142Nd
	CD4	144Nd
	CD19	145Nd
	CD14	146Nd
	CD56	149Sm
	CD66b	152Sm
	CD3	170Er
	CD16	209Bi
Human T Cell Profiling CyTOF Panel, 10 Antibodies (PN 201340)	TCRaβ	141Pr
	CD45RA	150Nd
	CD161	151Eu
	CD25	153Eu
	CD27	155Gd
	CD28	160Gd
	CD38	161Dy
	CD45RO	163Dy
	CD197/CCR7	167Er
Human Immune Checkpoint Core CyTOF Panel, 9 Antibodies (PN 201341)	CD127/IL-7Ra	168Er
	CD154/CD40L	143Nd
	CD366/TIM-3	154Sm
	CD279/PD-1	156Gd
	CD134/OX40	158Gd
	CD152/CTLA-4	162Dy
	TIGIT	166Er
	CD137/4-1BB	173Yb
	CD274/PD-L1	174Yb
Human Cytokine Core CyTOF Panel, 5 Antibodies (PN 201344)	CD95/Fas	176Yb
	IL-2	112Cd
	TNFα	114Cd
	IFNγ	116Cd
Human Cytokine Expansion CyTOF Panel, 3 Antibodies (PN 201346)	IL-4	171Yb
	IL-17A	195Pt
	IL-5	147Sm
Human Cytotoxic Mediators CyTOF Panel, 3 Antibodies (PN 201345)	IL-10	148Nd
	IL-21	172Yb
	IL-6	106Cd
Individual Maxpar antibody	Perforin	196Pt
	Granzyme B	198Pt
	TGF-β1/LAP	164Dy

Product	Targets	Metal
<u>Human Broad Immune Checkpoint CyTOF Bundle, 34 Antibodies (PN 201347)</u>		
Human TBMNK+G CyTOF Panel, 9 Antibodies (PN 201338)	CD45	89Y
	CD8a	142Nd
	CD4	144Nd
	CD19	145Nd
	CD14	146Nd
	CD56	149Sm
	CD66b	152Sm
	CD3	170Er
	CD16	209Bi
Human T Cell Profiling CyTOF Panel, 10 Antibodies (PN 201340)	TCRaβ	141Pr
	CD45RA	150Nd
	CD161	151Eu
	CD25	153Eu
	CD27	155Gd
	CD28	160Gd
	CD38	161Dy
	CD45RO	163Dy
	CD197/CCR7	167Er
Human Immune Checkpoint Core CyTOF Panel, 9 Antibodies (PN 201341)	CD127/IL-7Ra	168Er
	CD154/CD40L	143Nd
	CD366/TIM-3	154Sm
	CD279/PD-1	156Gd
	CD134/OX40	158Gd
	CD152/CTLA-4	162Dy
	TIGIT	166Er
	CD137/4-1BB	173Yb
	CD274/PD-L1	174Yb
Human Immune Checkpoint Expansion 1 CyTOF Panel, 3 Antibodies (PN 201342)	CD95/Fas	176Yb
	CD244/2B4	165Ho
	CD223/LAG-3	172Yb
Human Immune Checkpoint Expansion 2 CyTOF Panel, 3 Antibodies (PN 201343)	CD272/BTLA	175Lu
	CD278/ICOS	148Nd
	CD357/GITR	164Dy
	CD226/DNAM-1	171Yb

Product	Targets	Metal
<u>Human Broad Immune Profiling CyTOF Panel, 20 Antibodies (PN 201339)</u>		
Pan-leukocyte	CD45	89Y
	CD8a	142Nd
	CD4	144Nd
T cell	CD45RA	150Nd
	CD161	151Eu
	CD27	155Gd
	CD28	160Gd
	CD45RO	163Dy
	CD3	170Er
B cell	CD19	145Nd
	CD20	156Gd
Myeloid	CD123/IL-3R	143Nd
	CD14	146Nd
	CD11c	147Sm
	CD38	161Dy
	HLA-DR	176Yb
NK cell	CD16	209Bi
	CD56	149Sm
Granulocyte	CD66b	152Sm
	CD49d	141Pr

Panel Ordering Information

Product	Targets	Metal
	CD45	89Y
	CD196/CCR6	141Pr
	CD123	143Nd
	CD19	144Nd
	CD4	145Nd
	CD8a	146Nd
	CD11c	147Sm
	CD16	148Nd
	CD45RO	149Sm
	CD45RA	150Nd
	CD161	151Eu
	CD194/CCR4	152Sm
	CD25	153Eu
	CD27	154Sm
	CD57	155Gd
	CD183/CXCR3	156Gd
	CD185/CXCR5	158Gd
	CD28	160Gd
	CD38	161Dy
	CD56/NCAM	163Dy
	TCRγδ	164Dy
	CD294	166Er
	CD197/CCR7	167Er
	CD14	168Er
	CD3	170Er
	CD20	171Yb
	CD66b	172Yb
	HLA-DR	173Yb
	IgD	174Yb
	CD127	176Yb
	Cell-ID Intercalator-103Rh	103Rh

Maxpar Direct Immune Profiling Assay, 30 Antibodies (PN 201334 for 25-test format or PN 201349 for 5- test format)

Product	Targets	Metal
<u>Maxpar Direct Expansion Panels</u>		
	CD181/CXCR1	142Nd
	CD22	159Tb
Maxpar Direct Myeloid and B Cell Expansion Panel 1, 7 Antibodies (PN 201402)	CD80	162Dy
	CD163	165Ho
	CD33	169Tm
	CD279/PD-1	175Lu
	CD11b/Mac-1	209Bi
	CD40	142Nd
	CD22	159Tb
Maxpar Direct Myeloid and B Cell Expansion Panel 2, 7 Antibodies (PN 201403)	CD80/B7-1	162Dy
	CD163	165Ho
	CD24	169Tm
	CD279/PD-1	175Lu
	CD11b/Mac-1	209Bi
	CD181/CXCR1	142Nd
	CD337/NKp30	159Tb
Maxpar Direct NK Cell Expansion Panel 1, 7 Antibodies (PN 201404)	CD335/NKp46	162Dy
	CD279/PD-1	165Ho
	CD159a/NKG2A	169Tm
	CD278/ICOS	175Lu
	TIGIT	209Bi
	CD366/TIM-3	159Tb
	CD69	162Dy
Maxpar Direct T Cell Expansion Panel 1, 6 Antibodies (PN 201405)	CD223/LAG-3	165Ho
	CD159a/NKG2A	169Tm
	CD279/PD-1	175Lu
	TIGIT	209Bi
	CD11a	142Nd
	CD366/TIM-3	159Tb
Maxpar Direct T Cell Expansion Panel 2, 7 Antibodies (PN 201406)	CD95/Fas	162Dy
	CD279/PD-1	165Ho
	CD278/ICOS	169Tm
	CD184/CXCR4	175Lu
	TIGIT	209Bi

Product	Targets	Metal
	CD134/OX40	142Nd
	TIGIT	159Tb
Maxpar Direct T Cell Expansion Panel 3, 7 Antibodies (PN 201407)	CD69	162Dy
	CD279/PD-1	165Ho
	CD336/TIM-3	169Tm
	CD278/ICOS	175Lu
	CD137/4-1BB	209Bi
	CD107a/LAMP1	106Cd
Maxpar Direct Basic Activation Expansion Panel, 6 Antibodies (PN 201408)	Granzyme B	198Pt
	IFNγ	116Cd
	IL-2	112Cd
	Perforin	196Pt
	TNFA	114Cd
	CD69	113Cd
	CD107a/LAMP1	106Cd
	CD152/CTLA-4	162Dy
	Granzyme B	198Pt
Maxpar Direct T Cell Activation Expansion Panel, 11 Antibodies (PN 201409)	IFNγ	116Cd
	IL-2	112Cd
	IL-4	142Nd
	IL-10	165Ho
	IL-17A	169Tm
	Perforin	196Pt
	TNFA	114Cd
	CD33	169Tm
	CD40	142Nd
	CD69	113Cd
Maxpar Direct Myeloid and Lymphoid Activation Expansion Panel, 10 Antibodies (PN 201410)	CD80/B7.1	162Dy
	GM-CSF	159Tb
	IL-1β	209Bi
	IL-6	106Cd
	IL-10	165Ho
	CD279/PD-1	175Lu
	TNFA	114Cd

Panel Ordering Information

Product	Targets	Metal
<u>Maxpar OnDemand Mouse Immune Profiling Panel Kit, 33 Antibodies (PN 9200001)</u>		
Pan-leukocyte	CD45	89Y
	CD4	116Cd
	CD44	141Pr
	TCRβ	143Nd
	CD27	150Nd
	CD279/PD-1	159Tb
	CD127/IL-7Ra	165Ho
	CD62L	166Er
	TCRγδ	172Yb
	CD25	174Yb
	CD197/CCR7	176Yb
	CD8a	194Pt
	CD3e	196Pt
T cell	CD45R/B220	114Cd
	CD43	146Nd
	CD19	149Sm
	IgM	151Eu
	CD138	168Er
B cell	CD21	169Tm
	CD49b	152Sm
	CD335/NKp46	167Er
NK cell	NK1.1	170Er
	CD11b	148Nd
	CX3CR1	155Gd
Myeloid cell	CD80/B7.1	158Gd
	CD11c	161Dy
	CD170/Siglec-F	163Dy
	CD274/PD-L1	164Dy
	F4/80	173Yb
	XCR1	175Lu
	Ly-6G	195Pt
	Ly-6C	198Pt
	MHC Class II	209Bi
	DNA	103Rh
Live-cell identification	DNA	191Ir
	DNA	193Ir

Product	Targets	Metal
<u>Maxpar Mouse Intracellular Cytokine I Panel Kit, 8 Antibodies (PN 201310)</u>	IFNγ	165Ho
	IL-2	144Nd
	IL-4	166Er
	IL-5	143Nd
	IL-6	167Er
	IL-10	158Gd
	IL-17A	174Yb
	TNFα	162Dy
	CD45	147Sm
	CD11b/Mac-1	148Nd
<u>Maxpar Mouse Sp/LN Basic Phenotyping Panel Kit, 6 Antibodies (PN 201303)</u>	CD3e	152Sm
	CD8a	168Er
	CD4	172Yb
	B220	176Yb
<u>Maxpar Cell Cycle Panel Kit, 5 Antibodies (PN 201313)</u>	S-Phase (IdU)	127I
	pRb [Ser807/811]	150Nd
	CyclinB1	153Eu
	Ki-67	162Dy
<u>Maxpar Signaling I Panel Kit, 7 Antibodies (PN 201309)</u>	pHistone H3	175Lu
	pSTAT5	150Nd
	pSTAT1	153Eu
	p38	156Gd
	pSTAT3	158Gd
	Iκβα	164Dy
	pERK1/2	171Yb
	pS6	175Lu

Product	Targets	Metal
<u>Maxpar Mouse Sp/LN Phenotyping Panel Kit, 16 Antibodies (PN 201306)</u>	Ly-6G/C/Gr-1	141Pr
	CD11c	142Nd
	CD69	145Nd
	CD45	147Sm
	CD11b/Mac-1	148Nd
	CD19	149Sm
	CD25	151Eu
	CD3e	152Sm
	TER-119	154Sm
	CD62L	160Gd
	CD8a	168Er
	TCRβ	169Tm
	NK1.1	170Er
	CD44	171Yb
	CD4	172Yb
	B220	176Yb

Explore at standardbio.com/resources/panel-design



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