



Maxpar OnDemand Mouse Immuno-Oncology IMC Panel Kits

Catalog numbers: 9100005 (9100001, 9100002, 9100003, 9100004)

Storage: Store antibodies at 2–8 °C. Do not freeze.

Application: IMC™ FFPE

Contents: Maxpar® and Maxpar OnDemand™ antibodies*, 0.5 mg/mL (See table for individual antibody quantities provided per panel.)

* The antibodies are provided in individual tubes, not in a pre-mixed cocktail.

Technical Information

Description: Mouse tumor models are widely used for preclinical cancer studies and drug testing. The Maxpar OnDemand Mouse Immuno-Oncology (IO) IMC Panel Kits are optimized for use in formalin-fixed, paraffin-embedded (FFPE) mouse tissue sections using Imaging Mass Cytometry™ (IMC). The panel kits enable multiparametric assessment of a large variety of mouse tumors, offering critical insight into the organization of the tumor microenvironment (TME).

Combination IO panel kit (includes all 4 individual panel kits):

The Maxpar OnDemand Mouse Immuno-Oncology IMC Panel Kit (9100005) enables evaluation of critical pathophysiological parameters of the murine TME using 28-plex IMC. This panel kit includes 28 meticulously tested and verified antibodies and DNA markers. The kit consists of 4 modular subpanels: Mouse Tissue Architecture IMC Panel Kit (9100001), Mouse Cancer Cell Process IMC Panel Kit (9100002), Mouse Immune Phenotyping IMC Panel Kit (9100003), and Mouse Immune Activation IMC Panel Kit (9100004).

Individual panel kits (modular, can mix and match):

- The Mouse Tissue Architecture IMC Panel Kit (9100001) identifies the underlying cellular and structural architecture of the TME. This panel kit includes 7 verified antibodies that enable identification of tumor cells, immune cells, vasculature, smooth muscle cells, and components of the extracellular matrix.
- The Mouse Cancer Cell Process IMC Panel Kit (9100002) identifies activation of cellular processes associated with cancer signaling, growth, and metastasis. This panel kit includes 10 verified antibodies that enable assessment of signaling pathway activation, proliferation, metabolism, and biomarkers of epithelial to mesenchymal transition in cancer cells.
- The Mouse Immune Phenotyping IMC Panel Kit (9100003) delineates lymphoid and myeloid cell subtypes of immune cell infiltrates in tumors. This panel kit includes 8 verified antibodies that enable phenotyping of helper and cytotoxic T cells, B cells, macrophages, and other antigen presenting cells.
- The Mouse Immune Activation IMC Panel Kit (9100004) assesses the functional state of immune cells. This panel kit includes 4 verified antibodies that enable assessment of immune cell proliferation, cytotoxic T cell activation, and identification of regulatory T cells and cytotoxic and inflammatory myeloid cells.

Panel Kit	Target	Clone	Metal	Dilution†	Quantity‡	
Maxpar OnDemand Mouse Immuno-Oncology IMC Panel Kit (9100005)	Maxpar OnDemand Mouse Tissue Architecture IMC Panel Kit (9100001)	Alpha-smooth muscle actin	1A4	141Pr	1:200–1,000	25 µg
		CD31	EPR17259	171Yb	1:50–200	30 µg
		CD44	IM7	153Eu	1:50–200	25 µg
		CD45	D3F8Q	151Eu	1:100–500	15 µg
		Collagen type I	Polyclonal	173Yb	1:100–500	15 µg
		Fibronectin	EPR19241-46	152Sm	1:50–200	30 µg
		Pan-cytokeratin	AE-1/AE-3	174Yb	1:100–500	15 µg
	Maxpar OnDemand Mouse Cancer Cell Process IMC Panel Kit (9100002)	Beta-actin	2F1-1	154Sm	1:100–1,000	25 µg
		Beta-catenin	5H10	169Tm	1:50–200	30 µg
		BRCA1	MS110	172Yb	1:25–200	25 µg
		E-cadherin	24E10	158Gd	1:50–200	25 µg
		EpCAM	EPR20532-222	147Sm	1:50–200	15 µg
		Ki-67	B56	150Nd	1:50–500	15 µg
		pERK1/2	D13.14.4E	164Dy	1:50–200	30 µg
		pS6[S235/S236]	N7-548	175Lu	1:50–500	25 µg
		pTyrosine	P-Tyr-100	144Nd	1:50–200	25 µg
		Vimentin	D21H3	149Sm	1:100–1,000	15 µg
	Maxpar OnDemand Mouse Immune Phenotyping IMC Panel Kit (9100003)	B220	RA36B2	176Yb	1:200–1,000	15 µg
		CD3	Polyclonal, C-terminal	170Er	1:50–200	25 µg
		CD4	BLR167J	159Tb	1:50–200	30 µg
		CD8	EPR21769	162Dy	1:50–200	30 µg
		CD11b	EPR1344	163Dy	1:100–500	15 µg
		F4/80	D2S9R	156Gd	1:50–200	30 µg
		Ly-6G	1A8	166Er	1:100–500	15 µg
	Maxpar OnDemand Mouse Immune Activation IMC Panel Kit (9100004)	MHC class II	M5/114.15.2	161Dy	1:25–100	30 µg
		FoxP3	FJK-16s	165Ho	1:50–200	30 µg
		Granzyme B	EPR22645-206	155Gd	1:50–200	30 µg
		iNOS	SP126	160Gd	1:25–100	30 µg

† Suggested initial dilution range. For optimal performance, it is recommended that the antibody be titrated for the desired application.

‡ 15 µg and 25 µg quantities are supplied in a single tube. 30 µg quantity is supplied in 2 tubes of 15 µg each.

Technical Information

(continued)

Recommended use:

- For staining with the Maxpar OnDemand Mouse Immuno-Oncology IMC Panel Kits, prepare mouse FFPE tissue using standard techniques according to the Imaging Mass Cytometry Staining Protocol for FFPE Sections (400322). Additional materials and equipment may be required for tissue staining and acquisition.
- Each panel kit contains 15–30 µg (or 1–2 tubes) of each antibody. The amount provided is tailored to the anticipated use upon antibody dilution.

Recommended reagents:

- Cell-ID™ Intercalator-Ir—500 µM (201192B) is not provided with any of the panel kits but can be purchased separately from store.standardbio.com. See the reagent Technical Data Sheet for usage instructions.
- The IMC Cell Segmentation Kit (TIS-00001) can be combined with any of the panel kits. The IMC Cell Segmentation Kit includes 3 membrane markers for enhanced cell membrane detection and is recommended for conducting single-cell analysis. See the Maxpar OnDemand Mouse Immuno-Oncology Panel Kit Reveals the Spatial Landscape of the Tumor Microenvironment Application Note (FLDM-01012) for more information.

Safety

Use standard laboratory safety protocols. Read and understand the safety data sheets (SDSs) before handling chemicals. To obtain SDSs, go to store.standardbio.com and search using either the product name or the catalog number.

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