PD-L1 FixVUE

formerly UltiMapper® I/O PD-L1

Determine whether the tumor is “hot” or “cold”.

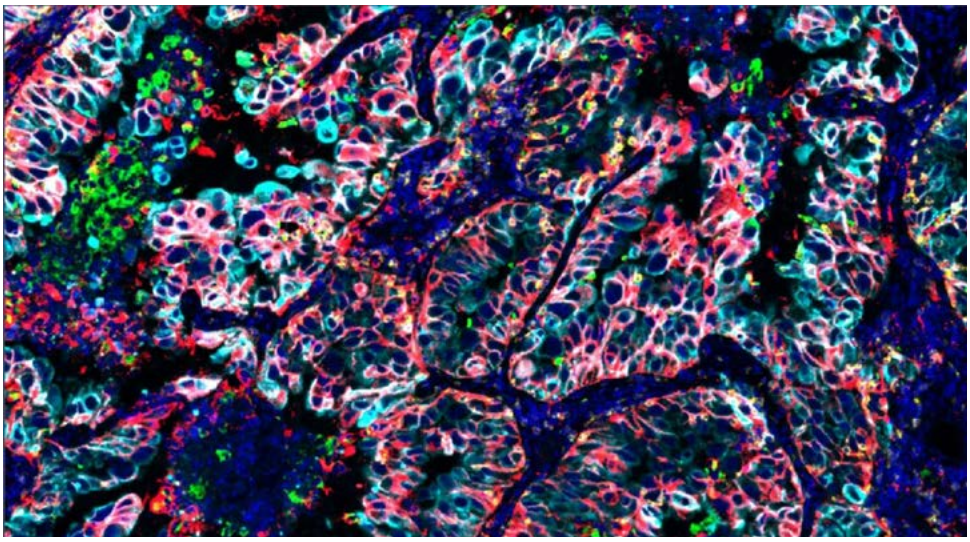
Our Immune infiltration 4-plex/5-color panel enables co-localization of macrophages, cytotoxic T cells, tumor cells, and the underlying inhibitory or inflammatory mechanisms at play along the PD-L1 axis.

This antibody panel consists of the following markers:

CD8 | CD68 | PD-LI | PanCK/SOX10 | Nuclear counterstain

Cell Phenotypes

Cell Phenotyping with the PD-L1 FixVUE Panel



PD-L1 FixVUE Panel staining non-small cell lung cancer tissue. CD8 (green), CD68 (yellow), PD-L1 (red), panCK (cyan), and nuclear counterstain (blue).

The antibody panel in the PD-L1 FixVUE enables users to detect immune infiltration and profile tumor samples. CD8 is a marker for cytotoxic immune cells (mainly cytotoxic T cells). CD68 is a marker for macrophages. PD-L1 is an immune checkpoint marker that can be expressed on both macrophages and tumor cells. SOX10 is a tumor marker for melanomas while panCK detects carcinomas; antibodies for panCK and SOX10 are provided as a cocktail in this panel. The expression level of PD-L1+ tumor cells and their proximity to CD8+ T cells have been highlighted as potential predictors of therapeutic response.

Phenotype	CD8	CD68	PD-L1	PanCK/SOX10
Cytotoxic immune cells	✓			
Macrophages		✓		
PD-L1 checkpoint expression			✓	
Carcinoma (panCK) or Melanoma (SOX10)				✓
Immunosuppressive macrophages		✓	✓	
Immune evading tumor cells			✓	✓

Product Biology

Marker	Main Cell Type	Function
CD8	Cytotoxic T cells	Cytotoxic T-cells are responsible for mediating apoptosis of cancer cells through the release of perforin and granzyme B from the T-cells. Increased levels of PD-L1+ cells alone in tumor samples provide limited differentiation between samples. However, the proximity of PD-L1+ cells to CD8+ cells may support better differentiation.
CD68	Macrophages	Macrophages modulate the immune response.
PD-L1	Checkpoint protein	Allows cells to escape immune surveillance by binding to PD-1. A search of ClinicalTrials.gov yields nearly 700 clinical trials with the keyword PD-L1. The association of PD-L1 expression with clinical outcome is uncertain at this time, but researchers are working to establish the relationship of this marker to other markers such as CD8
PanCK/SOX10	Tumor cells	A cocktail of optimized reagents for the detection of pan-Cytokeratin and Sox10 protein markers is provided. Cytokeratins are expressed in cells of an epithelial origin including most carcinomas. Sox10 is expressed in cells derived from the neural crest including melanocytes that give rise to melanomas.