PD-1 FixVUE formerly UltiMapper[®] I/O PD-1

Determine whether the immune response has exhausted.

Our Immune exhaustion 4-plex/5-color panel enables co-localization of T cells, memory T cells, tumor cells, and the underlying PD-1 checkpoint immune exhaustion mechanism at play.

This antibody panel consists of the following markers:



Cell Phenotypes

Cell Phenotyping with the PD-1 FixVUE Panel



PD-1 FixVUE Panel staining non-small cell lung cancer tissue. CD3 (green), CD45RO (yellow), PD-1 (red), panCK (cyan), and nuclear counterstain (blue).

The PD-1 FixVUE antibody panel enables users to profile tumor samples by detecting the location and abundance of memory T cells and exhausted T cells. CD3 is a general marker for T cells. CD45RO is a marker for memory T cells, which have been primed against antigens and can provide anti-tumor immune responses. PD-1 marks exhausted or suppressive T cells and can serve a pro-tumor function to help tumors evade the immune system. SOX10 is a tumor marker for melanomas while panCK detects carcinomas; antibodies for panCK and SOX10 are provided as a cocktail in this panel.

Phenotype	CD3	CD45RO	PD-1	PanCK/SOX10
T cells	~			
Memory cells		~		
Exhausted cells			~	
Carcinoma or Melanoma				~
Memory T cells	~	~		
Exhausted memory cells		~	~	
Exhausted T cells	~		~	
Exhausted memory T cells	~	~	~	

Product Biology

Marker	Main Cell Type	Function
CD3	T cells	Identifies all T cells and is the most specific marker for T cells, including lineage based markers such as CD4 and CD8.
CD45RO	Memory T cell	Indicates that the T cell has previously encountered its cognate antigen. An increase in CD45RO+ T cells in tumors is associated with a better prognosis.
PD-1	Exhausted T cell	A marker of T-cell exhaustion indicating that normal function of the cell has been disrupted. May also indicate an immuno-suppressive phenotype. Increased levels of PD-1+ T cells are associated with a poorer prognosis. PD-1 is the target of multiple therapeutics.
CK/Sox10	Tumour cells	The panel may be used to interrogate many tumor sample types for Research. 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.