

T-reg FixVUE

formerly UltiMapper® I/O T-reg

Identify regulatory T cells and cytotoxic T cells within the tumor context.

This T-reg 4-plex/5-color panel enables the characterization of different T cells and how they regulate immune response.

This antibody panel consists of the following markers:

CD4

CD8

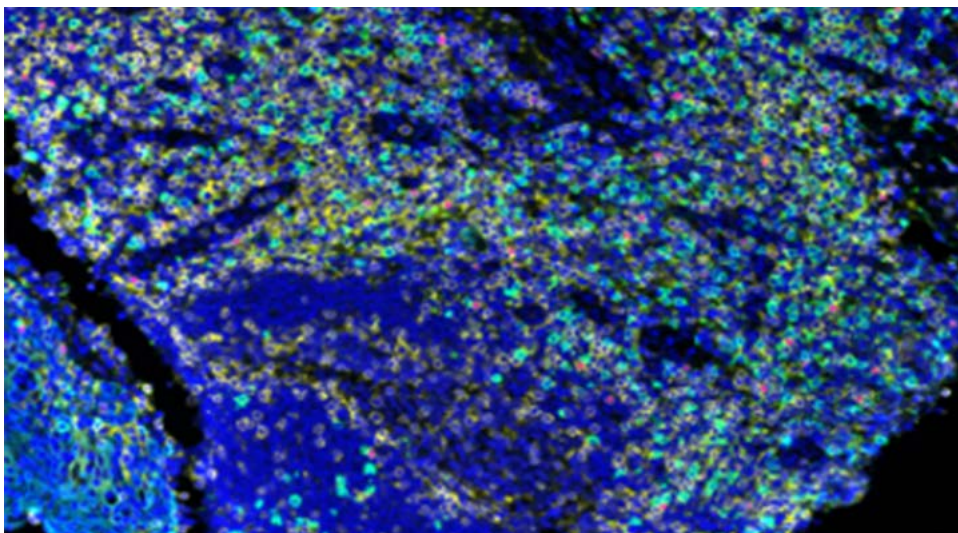
FoxP3

PanCK/SOX10

Nuclear counterstain

Cell Phenotypes

Cell Phenotyping with the T-reg FixVUE Panel



T-reg FixVUE Panel staining non-small cell lung cancer tissue. CD4 (green), CD8 (yellow), FoxP3 (red), panCK/SOX10 (cyan), and nuclear counterstain (blue).

The T-reg FixVUE antibody panel enables users to identify regulatory T cells (T-regs) and cytotoxic T cells within the tumor context. CD4 is phenotypically expressed on the surface of T helper cells. CD8 is a marker for cytotoxic T cells. FoxP3 is a transcription factor and marker of cellular activation. The co-expression of CD4 and FoxP3 indicates the T-reg cell phenotype. 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	CD4	CD8	FoxP3	PanCK/SOX10
T helper cell	✓			
Regulatory T cell	✓		✓	
Double-positive T cell	✓	✓		
Cytotoxic T cell		✓		
Activated cytotoxic T cell		✓	✓	
Activated double-positive T cell	✓	✓	✓	
Tumor cell				✓

This multiplex IHC panel enables the spatial identification of single biomarkers and co-expression in cells enabling the observation of several phenotypes. The above is a partial list of the 16 distinct binary phenotypes that this panel can identify. The number of phenotypes increases if binned marker intensities are taken into account.

Product Biology

Marker	Main Cell Type	Function
CD4	Helper T cell	T-helper cells play an important role in the adaptive immune system by helping regulate the immune response. The main cellular phenotype that expresses CD4 is mature helper T cells.
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.
FoxP3	Regulatory T cell	FoxP3 is a transcription factor and often regarded as a master regulator of regulatory T cells. Regulatory T cells expressing FoxP3 generally decrease the immune response and can prevent tumor cell infiltration. Recent evidence suggests that FoxP3 is transiently expressed by activated T cells.
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.