## **T-act FixVUE** formerly UltiMapper<sup>®</sup> I/O T-act

Determine whether T cells have the potential to mediate cell death.

This T cell activation 4-plex/5-color panel enables co-expression of proliferating cells, cytotoxic cells, tumor cells, and the underlying proliferative index and potential for T cell mediated death.

## This antibody panel consists of the following markers:



## **Cell Phenotypes**

Cell Phenotyping with the T-act FixVUE Panel



For the determination of cell proliferation and T-cell activation.

T-act FixVUE Panel staining non-small cell lung cancer tissue. CD3 (red), Granzyme B(green), Ki67(orange), panCK (cyan), and nuclear counterstain (blue).

The T-act FixVUE antibody panel enables users to identify activated T cells. CD3 is a marker of T cells. Granzyme B is produced, stored, and released by cytotoxic T cells to mediate cellular death in combination with perforin. Ki67 is a nuclear protein that is a marker of proliferation. Co-expression of CD3, Granzyme B, and Ki67 indicates proliferating cytotoxic T cells. SOX10 is a tumor marker for melanomas while panCK detects carcinomas (provided in a cocktail).

Phenotype	CD3	Granzyme B	Ki67	PanCK/SOX10
T cells	~			
Cytotoxic cells		~		
Proliferating cells			~	
Carcinoma or Melanoma				~
Cytotoxic T cells	~	~		
Proliferating T cells	~		~	
Proliferating cytotoxic cells		~	~	
Proliferating cytotoxic T cells	~	~	~	
Proliferating tumour 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.
Granzyme B	Cytotoxic T cells and NK cells	Granzyme B is produced, stored, and released by cytotoxic cells to mediate cellular death in combination with Perforin.
Ki67	Proliferating cells	Ki67 is expressed within the nucleus during the phases of mitosis and is strongly associated with cell proliferation.
CK/Sox10	Tumor 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.