Vectra® Polaris™ Automated Quantitative Pathology Imaging System

Commonly used acronym: *Polaris*

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SCOPE OF THE METHOD

The Method relates to	Human health
The Method is situated in	Basic Research, Translational - Applied Research
Type of method	In vitro - Ex vivo
This method makes use of	Other (e.g. bacteria): Human and mice tissues

DESCRIPTION

Method keywords

multiplex immunohistochemistry

multispectral Imaging

FFPE tissue sections

TMAs

inForm Tissue Finder

Scientific area keywords

Immunology
Oncology
Quantitative pathology
Biomarkers

Method description

The Vectra® Polaris™ Automated Quantitative Pathology Imaging System integrates both multispectral imaging and automated slide scanning to better visualize, analyze, quantify, and phenotype immune cells in situ in FFPE tissue sections and TMAs.

Lab equipment

The visualization of multiplex IHC requires a multispectral imaging system.

Method status

Internally validated

PROS, CONS & FUTURE POTENTIAL

Advantages

State of the art multispectral imaging enables the identification and downstream quantification of multiple overlapping biomarkers (up to 6) without the interference of autofluorescence as the signals are unmixed from one another. Integrated inForm and phenoptr tissue analysis software packages support configurable projects for biomarker quantification and spatial analysis.

Challenges

Time consuming.

Modifications

The acquisition of a fully automated research stainer is planed in a near futur to standardize the staining.

Future & Other applications

The Vectra Polaris Automated Quantitative Pathology Imaging System is a cutting-edge tool for cancer immunology research, but also for apoptosis and/or proliferation assays, necrosis and fibrosis using conventional stains, cell cycle characterization, DNA damage determination, inflammation, autoimmune diseases, transplant acceptance, neurodegenerative diseases, and many more!

REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION

Associated documents

PRD_013272A_01_Vectra_Polaris.pdf

PARTNERS AND COLLABORATIONS

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