

# Vectra® Polaris™ Automated Quantitative Pathology Imaging System

*Commonly used acronym: Polaris*

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## SCOPE OF THE METHOD

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

## DESCRIPTION

### Method keywords

multiplex immunohistochemistry

multispectral Imaging

FFPE tissue sections

TMA's

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 planned in a near future 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

### Organisation

**Name of the organisation** Institut Jules Bordet

**Department** Molecular Immunology Unit

**Country** Belgium

**Geographical Area** Brussels Region

*Coordinated by*



*Financed by*

