

Vectra Polaris specification:

Tissue Formats	Tissue microarrays (TMAs) and tissue sections
Multispectral Range	440 - 780 nm
Modality	Brightfield and Fluorescence (multispectral or color)
Fluorescence Whole Slide Scanning Speed (1.5 cm x 1.5 cm sample at 20X)	11 slides/ hour (7 Color Opal, unmixed)
Brightfield Whole Slide Scanning Speed (1.5 cm x 1.5 cm sample at 20X)	10 slides/hour
Slide Capacity	80 slide capacity, automated image acquisition
Max. slide dimension (L*W*H)	76 mm * 27 mm * 1 mm
Multiplexing Capability	Separates up to 9 colors
Image Analysis Software (inForm)	Machine learning interface to automatically segment and quantitate tissue structures, cells and sub-cellular signatures
Resolution	10X (1.0 µm/pixel), 20X (0.5 µm/pixel) and 40X (0.25 µm/pixel)
Whole slide image (.qbtiff) file size (1.5 cm x 1.5 cm sample at 20X, 7 color)	~3 GB per file
Multispectral image (.im3) file size (1862 µm x 1396 µm field at 20X, 7 color)	~700 MB per file
File Format	PerkinElmer Whole slide scan image (.qbtiff), PerkinElmer multispectral images (.im3), monochrome or color images (JPEG, TIFF, BMP, PNG)

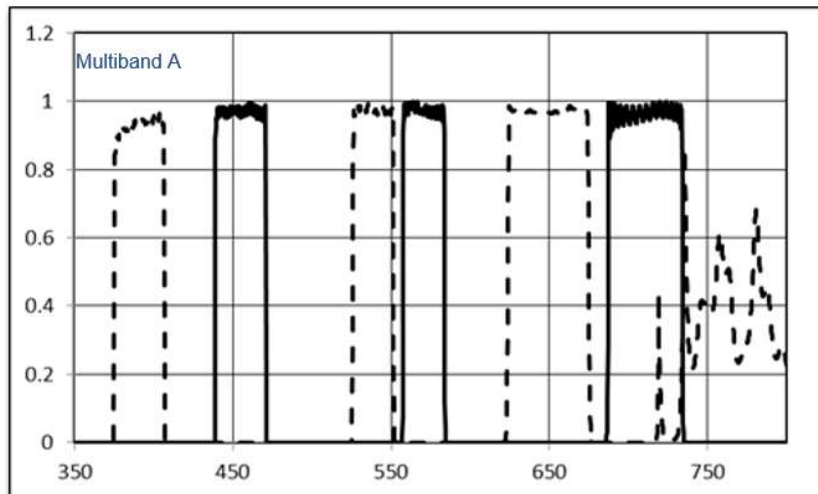
Filter information:

Scan filters:	DAPI, Opal 480, Opal 520, Opal 570, Opal 620, Opal 690, Opal 780
Multispectral filters:	DAPI MSI, Opal 480, FITC, Cy3, Texas Red, Cy5, Opal 780

## Vectra Polaris Multi-Band Filter A

### DAPI / Opal570 / 690

Part #	Filter Accy.	Exc band 1		Em band 1		Ex band 2		Em band 2		Ex band 3		Em band 3	
		CWL	FWHM	CWL	FWHM	CWL	FWHM	CWL	FWHM	CWL	FWHM	CWL	FWHM
CLS150078	A	391	32	453	30	538	25	571	20	649	50	709	40

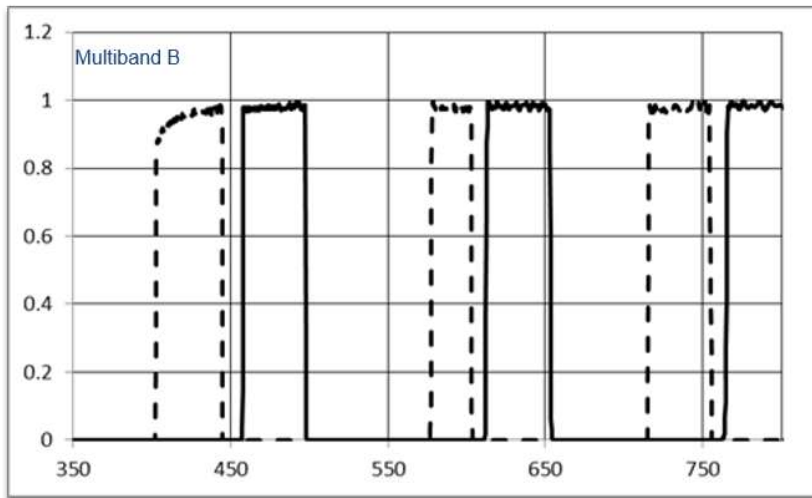


	A	B	C
DAPI	Blue		
Opal 480		Purple	
Opal 520			Green
Opal 540			
Opal 570	Yellow		
Opal 620		Yellow	
Opal 650			
Opal 690	Red		
Opal 780		Red	

## Vectra Polaris Multi-Band Filter B

### Opal 480 / 620 / 780

Part #	Filter Accy.	Exc band 1		Em band 1		Ex band 2		Em band 2		Ex band 3		Em band 3	
		CWL	FWHM	CWL	FWHM	CWL	FWHM	CWL	FWHM	CWL	FWHM	CWL	FWHM
CLS150079	B	424	42	478	40	590	25	633	40	735	40	832	135

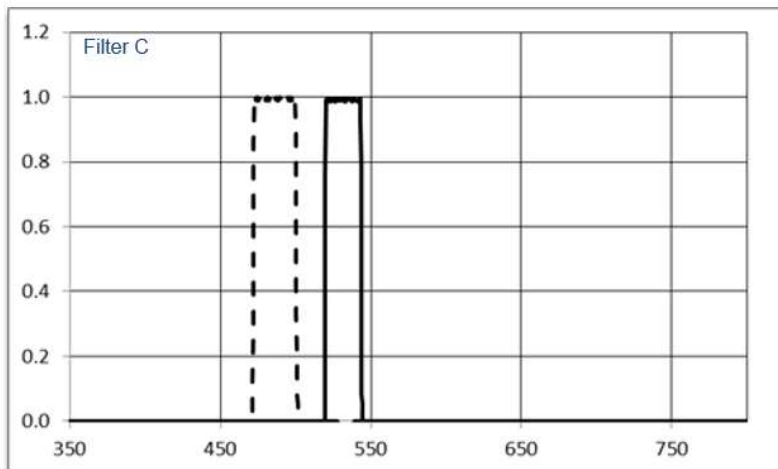


	A	B	C
DAPI	Blue		
Opal 480		Purple	
Opal 520			Green
Opal 540			
Opal 570	Yellow		
Opal 620		Yellow	
Opal 650			
Opal 690	Red		
Opal 780		Red	

## Vectra Polaris Narrow Band Green Filter C

### Opal 520

Part #	Filter Accy.	Exc band 1		Em band 1	
		CWL	FWHM	CWL	FWHM
CLS150077	C	486	30	532	18



	A	B	C
DAPI	Blue		
Opal 480		Purple	
Opal 520			Green
Opal 540			
Opal 570	Yellow		
Opal 620		Yellow	
Opal 650			
Opal 690	Red		
Opal 780		Red	

## 2019 Vectra Polaris Filter Cube Configuration

	9 Color Unmixing for Regions of Interest					(empty slot)	7 Color Whole Slide Unmixing <i>(designed specifically for Opal)</i>			
	DAPI + Opal 780	FITC	Cy3	Texas Red	Opal 480 + Cy5		DAPI + O570/690	Opals480 620/780	Opal 520	Sample AF
DAPI	Blue						Blue			Autofluorescence Detection
Opal 480					Purple		Purple			
Opal 520		Green						Green		
Opal 540		Green	Yellow							
Opal 570		Green	Yellow	Orange			Orange			
Opal 620			Yellow	Orange			Orange			
Opal 650				Orange	Red					
Opal 690					Red		Red			
Opal 780	Red							Red		

Centre for PanO1