

Providing Unprecedented Field of View

Go Optical

STOmics Microscope









High Resolution

Large Travel Range

Fast Imaging

Go Optical **STOmics Microscope**

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Go Optical

Providing Unprecedented Field of View

Go Optical is the STOmics microscope designed for stereo-seq. It can fully meet the imaging needs in various experimental processes of stereo-seq. Inte grating high-resolution imaging with the advanced algorithms of stereo-seq technology achieves a precise position of gene expression matrices in the tissue section and satisfies the multi-scenario application needs.

Highlights

- Fluorescence Channels (DAPI, FITC, TRITC, CY5)
- Maximum Travel Range (100 mm×70 mm)
- Main Application (Panoramic scanning imaging of biological tissue sections)
 - Objective Lens $(4\times, 10\times, 20\times, 40\times)$
 - Illumination Methods (Epi-illumination and trans-illumination)
 - Observation Methods (Epi-fluorescence, Epi-bright field &Transmitted bright field)





High Resolution

12-megapixel super-resolution imaging, accurately identifying track lines and tissue details, enabling segmentation at the tissue and even single-cell level.



Large Travel Range

The ultra-large scanning range of STOmics Microscope is 100 mm×70 mm, it can easily handle large-size chip scanning tasks.



Fast Imaging

A specially designed auto-focus detection function that only requires one manual focus to complete focusing and scanning of the whole chip.

Tested Data

The Ideal Partner for Stero-seq Imaging

The images captured by the STOmics Microscope Go Optical can be analyzed by algorithms and used to complete tissue segmentation. It also has the advantages of a large scanning range, fast scanning speed, high resolution, clear imaging, and low stitching error, meeting the user's multi-scenario application needs.



Stereo-seq Wofkflow Library Prep. & Sequencing Stereo-seq Transcriptomics Set Sample Library Prep Stereo-seq Analysis Workflow (SAW) Preparation Imaging Interactive Visualizaiton (Decrosslinking) Software and Permeabiilzaion **Total RNA** Capture & cDNA Synthesis



Data Processing

StereoMap

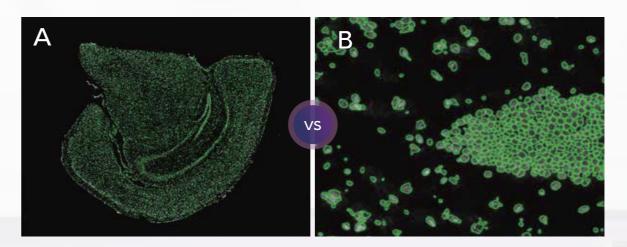
Image pre-processing & QC

Command line-based analysis pipelines

StereoMap

High Resolution Image

High resolution and low stitching images captured by Go Optical, combinate with Cellbin algorithm analysis, achieve precise segmentation at single-cell level.



Large Travel Range

6 x 6 A large travel range of 100 mm x 70mm, which meet the scanning needs of most STOmics chips. 2 x 3 0.5x0.5

Fast Image

Auto-focus mode, allowing for scanning of a 10mm x 10mm chip under 10x lens in just ≤ 70s



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Hardware Parameters

Indicators	Parameters		
Objective Lens	$4\times,10\times,20\times,40\times$ (optional) universal motorized objective lens converter, support expansion		
Obervation Method	Epi-fluorescence, Epi-bright field, Transmitted bright field		
Motorized XY Stage	Maximum travel range of 100 mm*70 mm		
Motorized Z Stage	Maximum travel range of 1.5 mm		
Motorized Fluorescence Unit	Six-position motorized fluorescence filter wheel, supporting maunal/auto switching		
Illumination	Epi-illumination light source, transmitted light source		
Fluorescence Channel	Standard configuration: DAPI, FITC, TRITC, CY5, and supports other dye filter blocks		
Camera Resolution	High image resolution: 3008 pixels (height) and 4112 pixels (width)		
Auto-focusing	Auto focus mode and map navigation mode		
Splicing Accuracy	≤5 μm (10×)		
Operation Mode	Manual operation by human eye observation; fully automatic scanning and imaging		
Scanning Time	Under a 10X objective lens scanning a 10×10 mm area, scanning time is ≤70 seconds		
Microscope Size	400 mm(L) * 334 mm((W) * 815 mm(H)		
Microscope Weight	Net weight 35 kg		
Voltage	200~240 V,~50/60 Hz		
Rated Power Consumption	300 VA		

Ordering Information

Product Name	Model	Cat. No	Note
STOmics Microscope	Go Optical	900-000586-00	1EA, RUO-CE
		900-001019-00	1EA, RUO-NRTL

Product Name	Cat. No	Note
40×-objective-lens (Optional)	060-000217-00	1 EA



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