

# Mini-plex at your desk

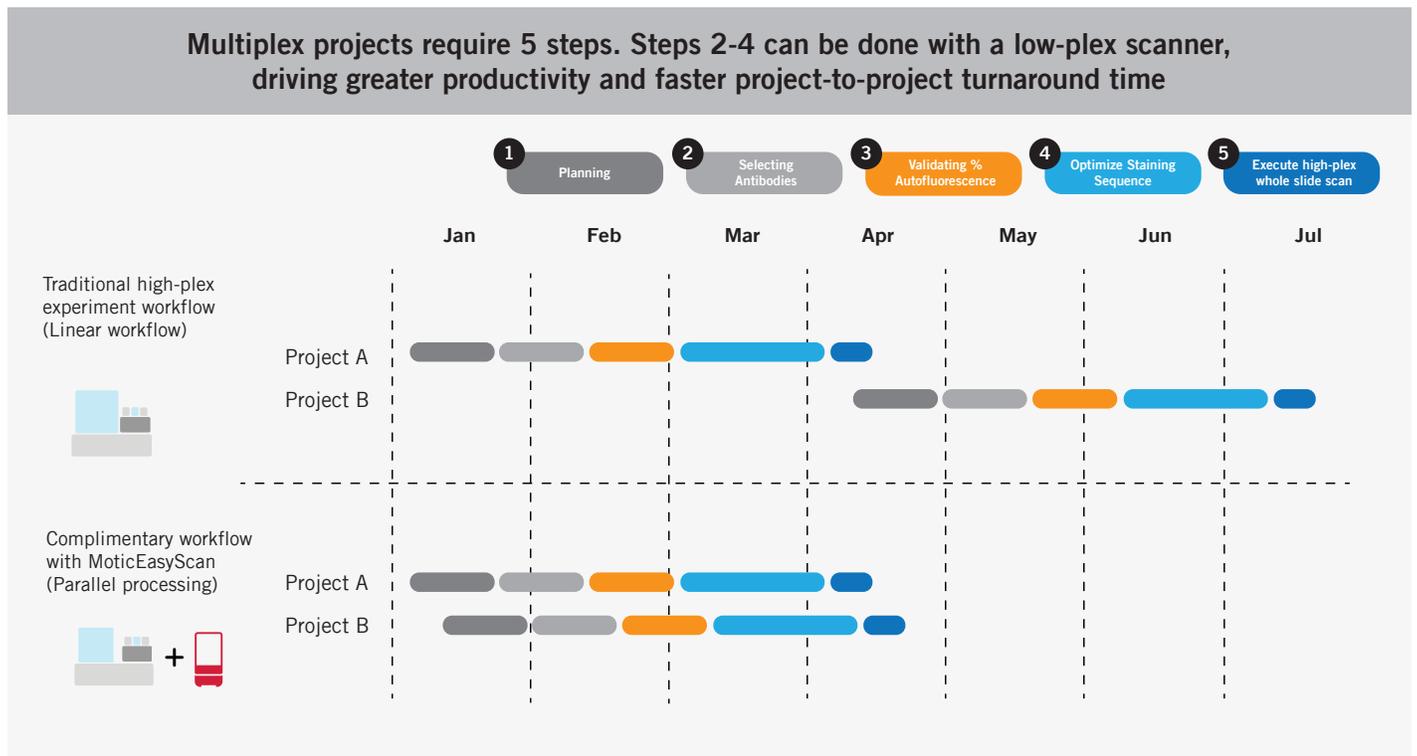
## Fluorescence Validation tool



## **Fast-paced labs benefit from high-resolution desktop slide scanners**

With new discoveries comes the responsibility of validation. Antibody procurement, autofluorescence, z-axis quantification, and tile registration are just some of the hurdles' researchers must leap to see their multiplex vision through. Getting a clear picture of the tumor microenvironment requires careful planning and execution. For labs adopting spatial biology, it can be daunting to build out a new assay. To ease this growing burden desktop slide scanners, traditionally used for telepathology, are now being leveraged in computational biology settings to speed up assay validation.

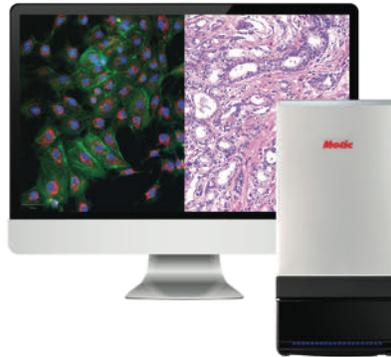
The process of assay development is commonly quoted to take six months for a new experiment. Designing a cocktail of novel markers to work together requires knowing each marker intimately, and using your high-plex equipment for your low-plex validation work can slow down progress. With digital pathology becoming common practice, desktop low-cost systems are available that can be placed around your workflow's hub of information, providing your team a way to multi-task their multiplex projects.



**Fig 1) Complimentary Workflow:** Using expensive multiplex scanners for low-plex experimental validation can potentially cause bottlenecks. MoticEasyScanner is complementary to multiplex scanners because it can absorb all the tedious low-plex validation work. This cuts assay development time in half for translational researchers while also allowing them to manage multiple validation projects simultaneously.

Using low-plex, and fast whole slide scanning right at the desk can give your team a fast track for validation projects. Imaging services are in greater demand than ever, and access to 'high-volume' digital pathology equipment can become a bottleneck if there is only one that every department shares. For Hub & Spoke workflow to come full circle, you should provide lots of spokes. MoticEasyScanner's fluorescence slide scanner is changing the game with a scanner that drives down cost in a way that allows labs to place instruments several at once. This can help validate new antibodies faster and help characterize known antibodies more completely, preventing inaccurate conclusions associated with under-sampling. Without adequate validation controls, interpreting such large volumes of data can lead to misleading findings. Quantitative pathology methods are proven to reduce bias while making research easier to replicate and build upon.

# Streamline Your Fluorescence Imaging with MoticEasyScan One FL



## MoticEasyScan One FL: single slide scanner with dual brightfield and fluorescence option



### 2-in-1 brightfield(BF) and immunofluorescence(IF) imagery

The first generation three-fluorescence system will be released as a single slide scanner and offer the ability to switch between brightfield and fluorescence mode. Three-color IF support for DAPI, FITC, and TRITC channels using narrow bands to capture discreet wavelengths.

- Blue wavelengths excited between 385-405nm (emission between 425-455)
- Green wavelengths excited between 410-495nm (emission between 505-540)
- Orange wavelengths excited between 550-575nm (emission between 585-625)



### Background enhancement feature to remove autofluorescence signal from digital slide imagery

Fluorescence overview image: typically the standard brightfield overview image will not reveal the location of the tissue sectioned onto the glass slide. In the fluorescence setup menu, users can now take an fluorescence overview instead which will reveal tissue location via low-resolution DAPI macro imaging.



### Compact footprint

The MoticEasyScan One FL chassis is roughly the size of an espresso machine making both high and low throughput models easy to find bench space.



### Easy-to-use

Stress-free calibration, 24/7 regional support and flexible IT and file type configuration options make MoticEasyScan One FL the entry level whole slide scanner of choice.

<b>Product</b>	MoticEasyScan One FL 	MoticEasyScan NEW Infinity 
<b>Slide Capacity</b>	Single Slide	60/100 Slides
<b>Source</b>	Fluorescence and Brightfield	Brightfield
<b>Use Case</b>	Validate antibodies faster with whole slide imagery scanned in .qptiff file format	Quantify RNA or capture high quality H/E imagery with subcellular resolution up to 0.13 um/pixel
<b>Features</b>	<ul style="list-style-type: none"> <li>• Flexible exposure setup</li> <li>• Photobleach protection</li> <li>• Autofluorescence removal</li> </ul>	<ul style="list-style-type: none"> <li>• 1000 slides per week throughput</li> <li>• Smart slide tray design</li> <li>• Automatic quality control</li> </ul>

## What is the difference between Slide Scanning VS Camera on a Microscope

### Digital Slide

Scanner stitches high-resolution images together into easy-to-use image formats like .svs and .qptiff

Scanners make it convenient to analyze large amounts of data with quantitative analysis

Digital slides can be directly exported to powerful analysis tools for whole slide analysis

### Camera on Microscope

A microscope captures FOV as a TIFF file, and the user must decide how to stitch the images together

Microscope imagery offers limited data analysis and becomes more complex at scale

Microscope imagery requires post-processing prior to image analysis

**Fig 2) Digital Pathology Helps:** Using a whole slide scanner instead of a traditional microscope in your validation workflow enables spatial biology research to process at scale