

# CapitalBio® LuxScan™ 10K Microarray Chip Scanner

LuxScan 10K Microarray Scanner is a compact high performance system for microarray imaging and data analysis of DNA, protein and cell arrays. Its advanced systems for optics, signal processing and motion control provide superior scan accuracy, and high detection sensitivity over a wide linear dynamic range. With optimized signal acquisition and processing elements, it is an ideal tool for profiling fluorescent labeled microarrays.

LuxScan 10K/A



LuxScan 10K/B



### High Resolution

\*Up to 5 $\mu$ m

\*Multiple resolutions are adjustable:  
5 $\mu$ m, 10 $\mu$ m, 20 $\mu$ m, 40 $\mu$ m



### High Sensitivity

Up to 0.1 fluorescent molecule/ $\mu$ m<sup>2</sup>



### Sequential Scanning

Without cross-channel interference



### High SNR

Image quality superior to most of the competitors



### Strong Function of Supporting Software

\*Thorough pre-set scanning scheme function simplifies scanning process

\*Dual-channel image aligning function makes image contact ratio higher

\*Equipped with strong technical support, application software can upgrade by free



Proprietary autofocus software together with CaISlide calibration slide allow the user recalibrate the focus position.

## Performance Specifications

Chip Size (nm)	(76.20±0.50)×(25.40±0.25) ×(1.00±0.10)	Scanning Resolution (μm)	5, 10, 20 and 40
Emission Wavelength (nm)	570 and 675	Min. Response Value (Fluorescent Molecule/μm <sup>2</sup> )	0.1
Excitation Wavelength (nm)	532 and 635	Repeatability	≥95%, CV≤10%
Laser Intensity	1%~100% continuously adjustable	Dynamic Range	>10 <sup>3</sup>
PMT Gain	450~950 continuously adjustable	Scanning Speed	30 s/cm <sup>2</sup> (10μm resolution)
Focus Adjustment Range (nm)	±250	Document Format	TIFF, BMP, JPG, PNG, LSR
Scanning Area (mm)	22×72		

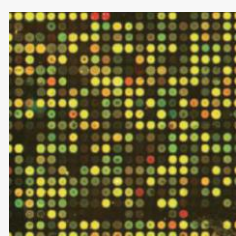
## Application Field

Dual-color or Single-color Fluorescent Test Analysis for High, Medium and Low Density Biochip

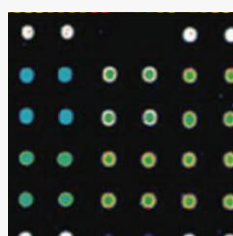
- Life science research, such as DNA methylation test, gene expression profile analysis and etc.
- Clinical test, such as autoimmune disease test, bacteria identification, drug resistance test and etc.
- Food safety test, such as veterinary drug residue test, food microbiological test and etc.



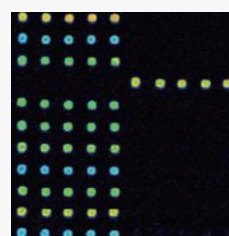
## Chip Scanning Result



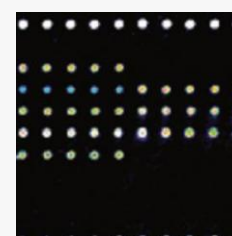
Gene expression profile chip scanning result



Protein chip scanning result



Gene test chip scanning result



Bacteria identification chip scanning result

## Order Information

Product Number	Product Name	Product Description
100010	CapitalBio® LuxScan™ 10K-A Micro-array Chip Scanner, 532nm and 635nm	Dual-laser microarray chip scanner
100020	CapitalBio® LuxScan™ 10K-B Micro-array Chip Scanner, 532nm and 532nm	Single-laser microarray chip scanner
100030	CapitalBio® LuxScan™ 10K-B Micro-array Chip Scanner, 635nm and 635nm	Single-laser microarray chip scanner