VISQUE® InVivo Smart-LF

Compact Preclinical In Vivo Fluorescent & Bioluminescent Imaging and Analysis System



VISQUE™ InVivo Smart-LF is an ideal *in vivo* imaging system for bioluminescent and fluorescent imaging as it provides outstanding performance at a reasonable price. The scientific CMOS camera developed solely for VISQUE™ InVivo Smart-LF provides high sensitivity with a quantum efficiency up to 94% at 550 nm. Its high sensitivity and low noise capabilities allow you to precisely detect and quantitate very weak signals in bioluminescent and fluorescent imaging. For multispectral fluorescent imaging, the system is equipped with a filter wheel providing four filter slots for GFP, PE, Cy5.5 and ICG fluorescent dyes and five filter slots for customized filters. For precise pharmacokinetic analysis and biodistribution studies, VISQUE™ InVivo Smart-LF not only allows real-time imaging of up to 37 frames per second but also provides 10 patented algorithms to analyze kinetics of drug distribution.

VISQUE™ InVivo Smart-LF featuring a compact size also allows you to save valuable laboratory space and to simply operate it with a laptop computer.



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Main Features

- Highly sensitive imaging from 300 940 nm
- Intelligent image analysis software
- · Real-time imaging
- Space-saving compact design
- Reasonable price with outstanding performance

Applications

- Pharmacology and toxicology
- Oncology
- Cardiovascular function
- Photo-stability test of molecules
- Cell therapy test
- Biodistribution of nanoparticle

Specifications

System				
Model		VISQUE™ InVivo Smart-LF		
Imaging Capability		In Vivo Imaging, Bioluminescence, Fluorescence, Real-time Imaging		
Weight and Dimension		About 22 kg (48.5 lb), 40 cm $ imes$ 40 cm $ imes$ 57 cm		
Camera				
Sensor		1.2" Backside Illuminated sCMOS		
Cooling		−50°C below ambient temperature, Thermoelectric Peltier Cooling		
Resolution (H $ imes$ V)		1824 × 1824		
Pixel Size		6.5 μ m $ imes$ 6.5 μ m		
Exposure Time		25 ms - 15 min		
Maximum Frame Rate		37 fps		
Digital Output		16 bit		
Binning		1 × 1, 2 × 2, 4 × 4		
Fluorescence				
Light Source		LED		
Fluorescence Filter		Up to 9 (optional)		
Lens				
Control		Motorized Iris / Zoom / Focus		
Zoom (Field of View, H $ imes$ V)		15 cm \times 15 cm (1 \times) - 5 cm \times 5 cm (3 \times)		
CleVue™ Software				
Image Acquisition Mode		Single-frame, Accumulation, Time-lapse		
Supported File Format		cif (exclusive file format), tif, bmp, jpg, png		
Kinetic Analysis		Dynamics graph and 10 kinds of algorithms for kinetic analysis		
Image Analysis		Autofluorescence removal, Spectral unmixing, Merge of multi-spectral images		
Stage				
Stage Type		Sliding stage, up to 3 mice		
Optional Accessory Heating Stage, Anesth				·
Representative Detectable Fluorophores				
Imaging - Filter	Imaging – Light	Excitation (nm)	Emission (nm)	Fluorescent Dyes
GFP	Blue	390 - 490	500 - 550	GFP / EGFP / Alexa 488 / FITC / QD 525
PE	Green	530 - 570	575 - 640	RFP / DsRed / PE / Alexa 568 / TRITC /
	0.00			QD 585 / QD 605 / QD 625
Cy5.5	Red	620 - 650	690 - 740	Cy5.5 / PKE680 / Alexa 680 / Alexa 700 /
	HyperRed	630 - 680		QD 705
ICG	NIR	740 - 790	810 - 860	ICG / QD 800





Australia & New Zealand