

LIAS ChemX Series

LIAS ChemX Series

Satisfy your image needs!



- For Chemiluminescence, Chemifluorescence, Fluorescence and Colorimetric imaging.
- Up to 4M pixel, Scientific Grade, Cooled CCD Camera.
- Superior Signal to Noise Ratio.
- Increased Sensitivity and Dynamic Range.
 - Built-in F0.95 Fixed Focus Lens.
 - Binning Mode 1x1, 2x2, 4x4.
- 4-Position Motor-Driven Movable Focus Platform (MFP) .
- Red / Green / Blue / White Illumination Modules.

ChemX series is a high-end level bioimaging system, with its versatility in Chemiluminescent, Chemifluorescent, Fluorescent and Colorimetric imaging. ChemX is equipped with a large-diaphragm lens, a high quantum efficiency cooled CCD camera, which make the optimized image capture and analysis. Besides, built-in epi white and optional Red / Green /

Blue illumination enabling a broad coverage of bio-image acquisition.

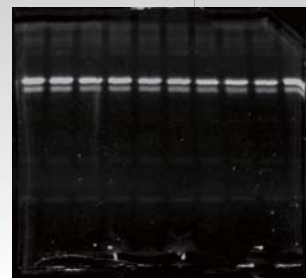


High Sensitivity for Chemiluminescence

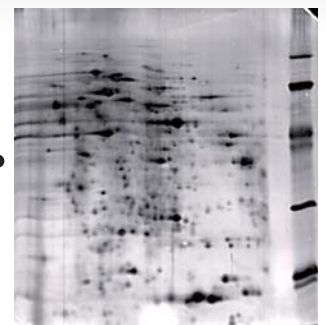
Avegene's proprietary cooling CCD camera contributes high sensitivity and high dynamic range to ChemX for low illuminant images capturing.

- The 7.4 μ m square pixels with a high-performance 2M or 4M pixel sensor provide high sensitivity and large full well capacity results in high dynamic range.
- Cooler CCD camera delivers low noise and higher sensitivity imaging of low-light fluorescence and chemiluminescence.
- Binning modes allow users to effectively increase the imaging sensitivity of the system. There are three settings: 1x1, 2x2, 4x4. The exposure time of 4 x 4 can be shortened to one-sixteenth of standard mode.
- f/0.95, c-mount fixed focus lens offer high sensitivity and produce sharp patterns with great definition.

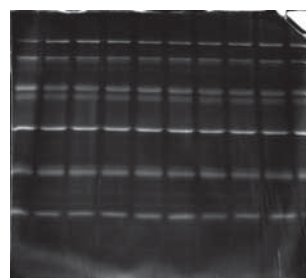
- Motor-driven, six-position filter wheel for viewing samples with 400~670nm emission filters.



• Pro-Q Diamond



SYPRO Ruby •



• SYPRO Red

Powerful Software

Xview consists of system control menu, image capture setting and image manipulation. Through FireWire, PC can be easy to connect with ChemX, that will automated detect if there exists PC connection. Xview will take the authority in ChemX operation from standalone operation when Xview is turned on.

ChemX and ChemLite can easy operate by PC with image capture software-Xview. Xview can

direct control ChemX all function like four-position movable focus platform (MFP) control, image capture, light source change, and exposure time adjust...etc.

GelVista is a powerful tool in 1D image analysis. Intuition design makes an user-friendly interface that implements the analysis of band and lane detection, background subtraction, normalization, molecular weight & quantity calibration, report generation and colony counting, ...etc.



Versatility for Different Application

Now more fluorescent dyes are used in molecular biology assays like GFP, SYPRO Green®, SYPRO Ruby®, TAMRA and Alexa Fluor ®...to stain protein or nucleic acid in membrane and gel. ChemX series equipped with Red / Green / Blue illumination and UV/White transilluminator can contain most of application to different commercial Chemifluo-

rescent dyes.

Six-position filter wheel can collocate 58nm filter, like 510BP and 515LP (SYBR Green I / II, SYPRO Orange, SYPRO Ruby, etc), 575BP (Alexa 514, Pro-Q Diamond, TAMRA, etc.), 595BP (EtBr, etc.) and 670LP Alexa 647, BODIPY 650/665, DDAO phosphate, etc.).

Experimental Method

Fluorescence & Chemifluorescence				Visible Stain	Chemiluminescence
Blue	Green	Red	UV	White	Dark
Attophos ECFP EGFP FAM FITC SYBR GOLD SYBR Green I/II SYPRO Orange SYPRO Ruby SYPRO Tangerine	5-ROX Alexa 514 532 546 555 Alexa 568 594 BODIPY 576/589 Cy3 Deep Purple HEX HNPP NED Pro-Q Diamond RFP Rhodamine Red R-phycoerythrin SYPRO Red TAMRA Tetramathyrodamine	Alexa 633 635 647 660 680 BODIPY 650/665 Cy5 DiD DDAO phosphate TOTO-3	EtBr Fluorescein GFP SYBR Green I SYPRO Orange SYPRO Red SYPRO Ruby Texas Red	ProStain(VisPro) Silver Stain CBB Stain X-Ray Film NBT/BCIP	ECL ECL+ ECL Advance Lumi-Light Plus Renaissance Super Signal Bright-Star CDP-Star CSPD

ChemX Series

ChemLite Series

Xlite Series

* Contact Avegene Technical Support for more experimental applications



Specifications

Model	Gel Documentation & Analysis		Chemiluminescence		Chemifluorescence & Chemiluminescence	
	Xlite 30 R	Xlite 200 R	ChemLite 200 F	ChemLite 400 F	ChemX 200 F	ChemX 400 F
Cat#	AG-LA030	AG-LA200R	AG-LA200CL	AG-LA400CL	AG-LA200F	AG-LA400F

I. Image Capturing Unit

Camera Set	CCD Sensor	Kodak KAI-0340	Kodak KAI-2020	Kodak KAI-2020	Kodak KAI-4021	Kodak KAI-2020	Kodak KAI-4021
	Pixel Size (µm, VxH)	7.4 x 7.4	7.4 x 7.4	7.4 x 7.4	7.4 x 7.4	7.4 x 7.4	7.4 x 7.4
	Dynamic Range	0 to 3.6 OD	0 to 3.6 OD	0 to 3.6 OD	0 to 3.6 OD	0 to 3.6 OD	0 to 3.6 OD
	Exposure Time	Up to 120 sec	Up to 120 sec	Up to 120 min	Up to 120 min	Up to 120 min	Up to 120 min
	Cooling Method	None	None	Thermoelectric	Thermoelectric	Thermoelectric	Thermoelectric
	Cooling Temperature	None	None	-35°C (Relative)	-35°C (Relative)	-35°C (Relative)	-35°C (Relative)
	Capture Resolution	VGA; 640x480	2.0M; 1600x1200	2.0M; 1600x1200	4.0M; 2048x2048	2.0M; 1600x1200	4.0M; 2048x2048
	Bit Depth	12 bit	12 bit	12 bit	12 bit	12 bit	12 bit
Lens Set	PC Interface	IEEE 1394(FireWire)	IEEE 1394(FireWire)	IEEE 1394(FireWire)	IEEE 1394(FireWire)	IEEE 1394(FireWire)	IEEE 1394(FireWire)
	Lens Type	6 X Room Lens	6 X Room Lens	Fixed Focus Lens	Fixed Focus Lens	Fixed Focus Lens	Fixed Focus Lens
	Motor-driven Lens Operation	X	X	X	X	X	X
	Auto Focus	X	X	X	X	X	X
	Lens Mount	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount

II. Intelligent Darkroom

Filter Set	Filter Turret	Motor-Driven, 6 position	Motor-Driven, 6 position	Motor-Driven, 6 position	Motor-Driven, 6 position	Motor-Driven, 6 position	Motor-Driven, 6 position
	Emission Filter (One standard set; Five for optional order)	595 nm (EtBr Stain)	595nm (EtBr Stain)	595nm (EtBr Stain)	595nm (EtBr Stain)	595nm (EtBr Stain)	595nm (EtBr Stain)
Control Set	Display Panel	Built-in 7" TFT LCD	Built-in 7" TFT LCD	Built-in 7" TFT LCD & PC	Built-in 7" TFT LCD & PC	Built-in 7" TFT LCD & PC	Built-in 7" TFT LCD & PC
	Standalone Control	Front Control Pad	Front Control Pad	Front Control Pad	Front Control Pad	Front Control Pad	Front Control Pad
	PC Control Interface	Optional	Optional	V (Windows XP)	V (Windows XP)	V (Windows XP)	V (Windows XP)
	Image Storage	USB Storage	USB Storage	USB Storage & PC	USB Storage & PC	USB Storage & PC	USB Storage & PC
	Motor Focus Platform (MFP)	X	X	Motor-driven, 4 locations	Motor-driven, 4 locations	Motor-driven, 4 locations	Motor-driven, 4 locations
Lighting Set	UV Transilluminator (26cm X 21cm)	V	V	V	V	V	V
	White Back Light	V	V	Optional	Optional	Optional	Optional
	Epi White Light	V	V	V	V	V	V
	Epi Blue Light	X	X	X	X	Optional	Optional
	Epi Green Light	X	X	X	X	Optional	Optional
	Epi Red Light	X	X	X	X	Optional	Optional

III. Software

System Control & Image Capture	Avegene Xview	Optional	Optional	V	V	V	V
Analysis	1D or 2D Analysis	Optional	Optional	Optional	Optional	Optional	Optional

IV. General Info

	Power	100V-240V	100V-240V	100V-240V	100V-240V	100V-240V	100V-240V
	Dimension (WxHxD)	620x1040x415mm	620x1040x415mm	620x1040x415mm	620x1040x415mm	620x1040x415mm	620x1040x415mm
	Weight	50Kg	50Kg	60Kg	60Kg	65Kg	65Kg
	Certification	UL,CE	UL,CE	UL,CE	UL,CE	UL,CE	UL,CE

* Avegene Life Science reserves the right to change the specifications without any prior notification.

**Effective date: October 1, 2007

Distributor Info