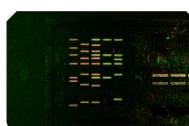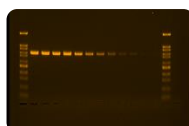# WEALTEC

KETA MLX II

All IN ONE SYSTEM
Software-controlled multi-purpose imaging system for versatile applications

SAMPLE TRAY AUTOMATIC IDENTIFICATION
Automatically detect Sample Tray ID with preset protocols to provide the correct image capture condition

SUPERIOR SENSITIVITY
Reduce the waiting time for your faint signal to appear Guarantee the lowest 2.4 pg level.
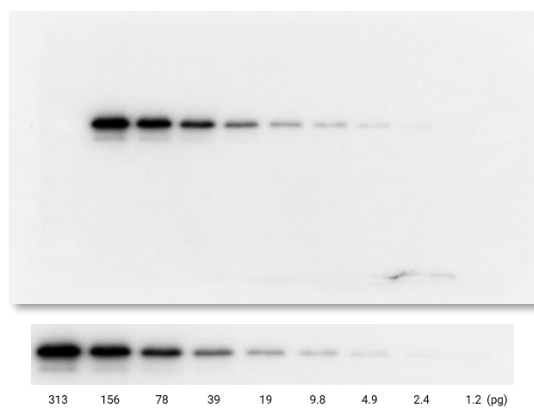
EASY IMAGE EXPORT
Export your images in a batch to your USB memory sticker Or through Wi-Fi instantly

KETA MLX II is a High-End multi-purpose research grade imaging system, ideal for molecular biology core facility. It consists of a superior 16-bit, 9.1 Megapixels and Peltier cooled camera element, software-controlled lens, seven-position motorized filter wheel come with a high transparent emission filter. Large visual area, MC 300 LED light set covers the wavelength range from visible to NIR as Epi-light source, low background 302 nm UV transilluminator. Inbuilt 24V power supply for green/white light sample tray, UV radiation safety interlock darkroom, 46 mm WK 301 to WK 305 emission filter as standard, energy saving mode provides camera turn off automatically while idling over than 15 minutes. Pre-set optimum condition, method create and edit capability.

KETA MLX II with inbuilt SBC and 12" touch panel LCD, exactly the editable software-controlled imaging system. It's not only available for traditional gel documentation but also equipped with Stain-Free gel UV activation capability. Blot detect support both Chemiluminescence and Fluorescence. The high Signal to Noise ratio of 9.1 megapixel 1 inch chip size, Peltier cooled camera cooling down temperature to 40℃ below ambient makes MLX II the most sensitive and high resolution system in the market.

Code recognizer enables MLX II automatically identify sample tray to drive the system with the specific emission filter, excitation light source, iris, focus and all preset parameter to get the best image by one click. The system also supports method create and recall for multiple users.

| 313 | 156 | 78 | 39 | 19 | 9.8 | 4.9 | 2.4 | 1.2 (pg) |

Two-fold dilution series of purified human transferrin from 625 pg to 2.4 pg
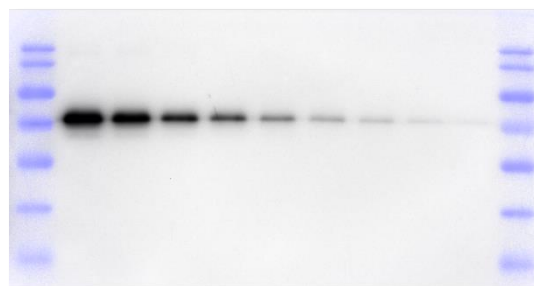
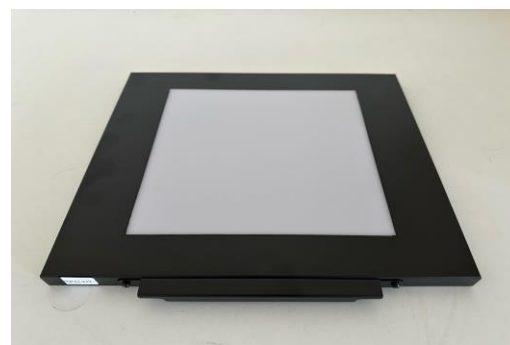**Image blending with the marker image with Auto Coloring**

MC 300 is the new LED Epi light source module for fluorescence western blot workflow. It covers wavelength from visible range 400nm to 640nm, with optional NIR 780nm to 800nm, coupled with narrow band emission filter delivering excellent result with all kinds of commercial fluorescent dyes.

Magic MP software package is dedicated for KETA MLX II which integrated with both Magic 1D and Magic Chemi software.

Magic 1D software package with genius capture mode CGM allows user to preset, save and recall capture parameter by one click. Maximum 30 seconds exposure time is available for single capture. The GCM function helps operator to get excellent image anytime.

Perfect darkroom calibration, camera shading correction, distortion correction, flat frame correction, adjustable brightness / contrast /, image profiling / blending, background defining, provides whole visual area imaging at the same level. In addition, four analysis functions, Molecular Weight and Mass Determination, Colony Counting, Microtiter Plate Assay and Spot Density Calculation are also included.

Just one click auto capture for chemiluminescent signal capture, functions include live / preview viewing, auto capture / auto quant capture / professional capture mode. DynaView, Batch Capture and Programming capture are included in Professional mode. DynaView is continuously accumulate signal emitted from the membrane and display with time sequence. Batch Capture function is to simulate the X-ray film exposure protocols to provide continuous image capture with different exposure time. Programming capture detects the signal with 10 sets of exposure time with pause function. Circle select interested region and recapture to get better result. Binning function with 1x1, 2x2, 4x4, and 8x8 augment the sensitivity. Interrupt warning stop and warn the user while capturing been disturbed. Auto-save function allows user to export with most common file formats such as PCX, TGA, DFN, PNG, IMG, TIFF, BMP, JPG, GIF, etc. at once.
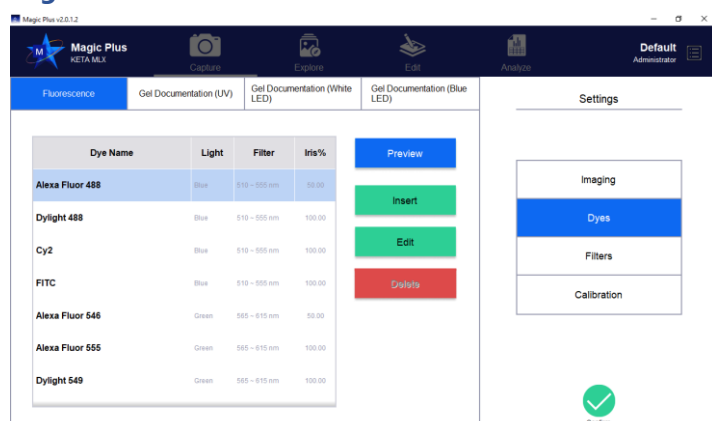

UV/Green/White light sample Tray

Fluorescence image Alexa Fluor 488
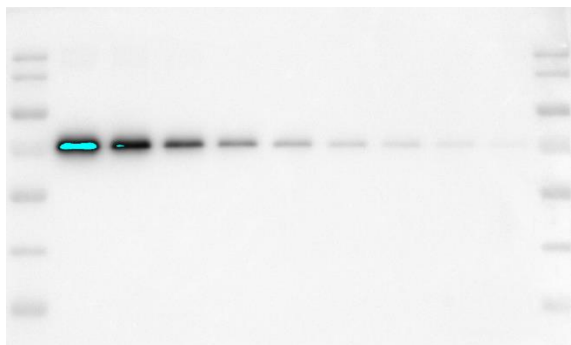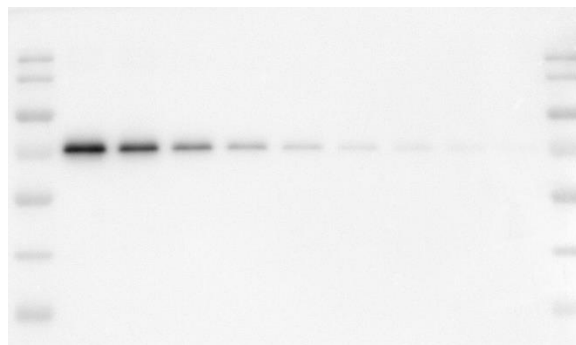

Magic MP software

Select specific dye

Compare images

Auto capture mode

Select the Auto Capture mode system automatic predict the optimal exposure time get perfect result both save time and never lost

any signal. Auto Quant mode same as above the image capture will stop at anyone pixel saturated help operator fast for quantification of protein.
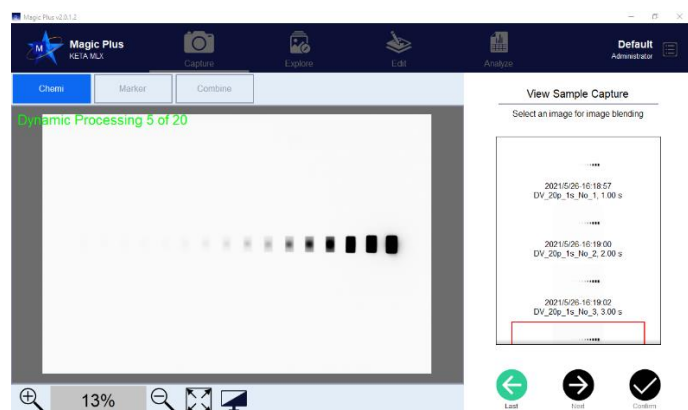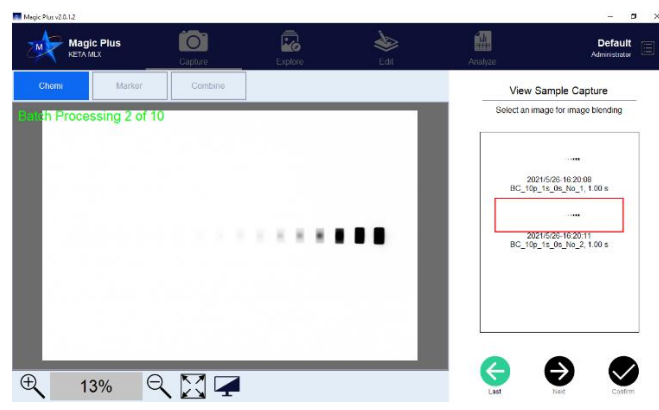

Auto Capture

Auto Quant Capture

Professional mode

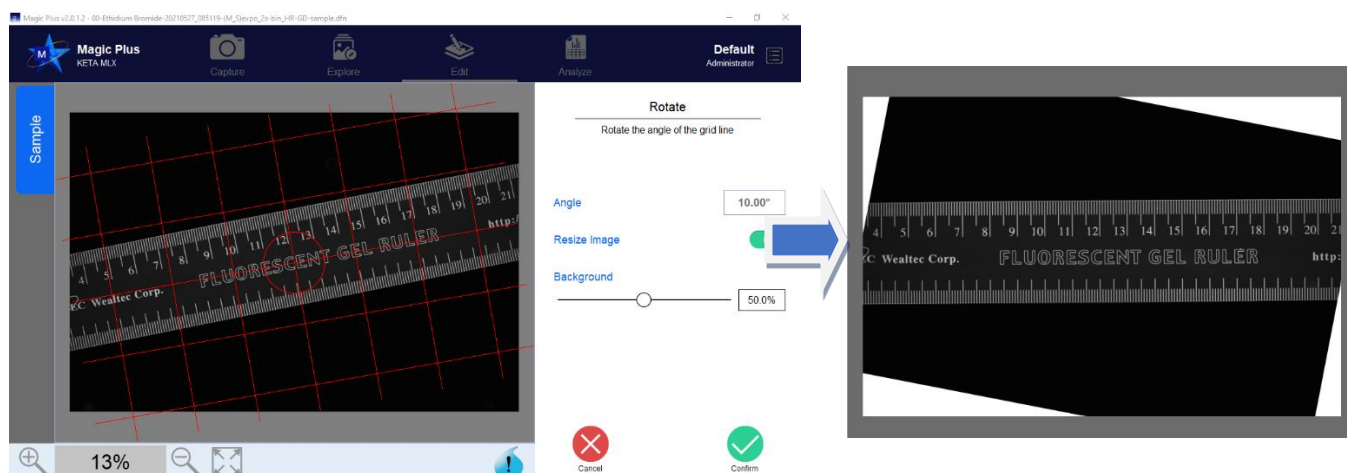DynaView and Batch capture for signal cumulate and X-ray film simulation

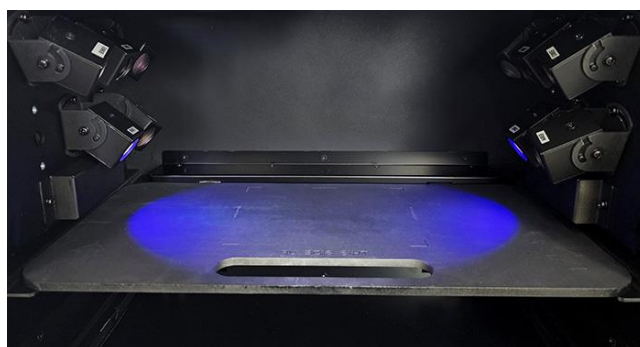

DynaView

Batch Capture

Image rotation

Non-mechanical image rotation capability 0-360 degree enables user to optimize the image with the desired position for professional report export

MC 300 supports versatile fluorescent western blot

MC 300 Epi light set includes two sets of full-spectrum LED covering wavelength from 400nm to 640nm (optional NIR 780nm to 800nm) for all fluorescent dye excitation on western blot application. Operator choose either the dye or the excitation wavelength, the MLX will automatically turn on the LED and drive the Emission filter to correct position by preset program without additional steps.

MC 300 light source for Alexa Fluor 488 dye

Motorized Filter Wheel

Software controlled seven 46mm filter position motorized filter wheel remains flexibility for chemiluminescent Imaging and adapted various emission filters for fluorescent western blot Imaging.

Seven position filter wheels

Image Analysis Function

Magic MP software provides powerful tool for user easily compare their images with previous images, enhance the images with the editing tools, and select the best images for quantification analysis.
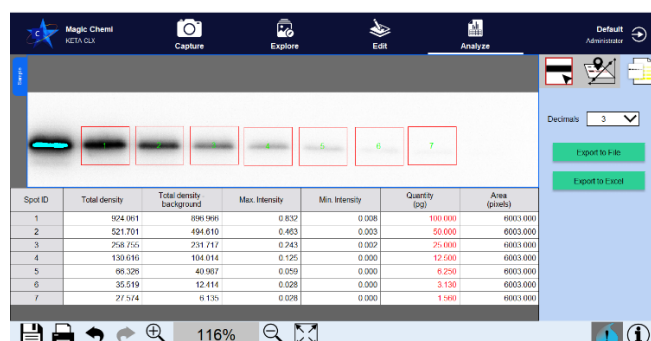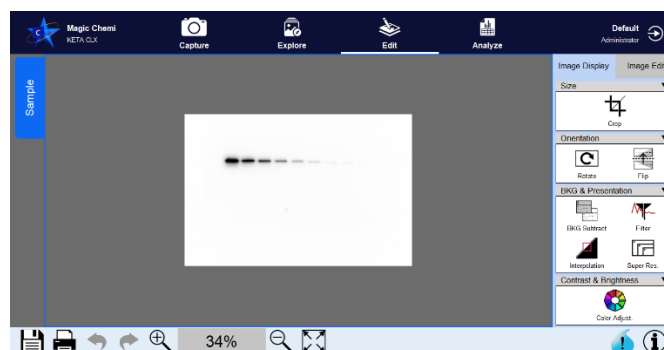

Image Edit and Display

Magic MP possess the traceable image enhancement functions which include: color/ brightness/ contrast adjustment, image profiling or blending, background defining, annotations on the image or masked layer, 3D color display, X-axis comparison, smiling gels correction, conversion, interpolate, Deconvolution, Super Resolution, flipping, rotation and distance measurement.

A

Professional Reporting

Institute: Wealtec Bioscience co., ltd.
Laboratory: Research and Development

Creator:
Print date: 2020/12/23 14:39:12

Specification

Model	KETA MLX II
Camera depth	16bit
Dynamic Range	>4.0
Operation temperature	0-40°C
Chip size	1"
Resolution	9.1M pixels
communication	Wi-Fi, USB
Binning	1X1,2X2, 4X4, 8X8
Pixel Size	2.4um x 2.4um
Cooling	Peltier, 40°C below ambient
Motorized Lens	F0.95, focal length
Filter Wheel	46mm, seven-position
Internal light source	MC 300 / 400nm to 640nm, optional NIR 780nm-800nm
UV-transilluminator	MD-20S 302nm
Tans-light Sample Tray	Green & White light, 20 x20cm
Sample Tray	White / Black, 20 x 20cm
Software	Magic MP
OS system	MS Windows 11
Physical dimensions	400 x 465 x 690mm (W x D x H)
Weight	30kg
Power	100 – 240V, 50 – 60Hz, 300W
Optional	
External Touch Screen	20" LCD Screen with touch panel
Thermal printer	Digital
Laser printer	Color Laser Printer

Filter Selection Guide

Filter Type	Em (nm)	Commercial fluorescence dye
WK 301	568-617	Coomassie Blue, SYBR Green, SYBR Gold, SYPRO Ruby, SYPRO Orange Alexa Fluor 546, Alexa Fluor Plus 555
WK 302	508-537	Alexa Fluor 488, Alexa Fluor Plus 488
WK 303	675-720	Alexa Fluor 647, Alexa Fluor Plus 647
WK 304	710-730	Alexa Fluor 680, Alexa Fluor Plus 680
WK 305	800-850	Alexa Fluor 790, Alexa Fluor Plus 800

Ordering Information

Catalog Number	Description
1150053	KETA MLX II complete include main body with 12.1" LED touch screen, SBC with 500G SSD, Wi-Fi, 5 USB port, Ethernet, Win11, WK 301 to 305 filter one each, one each white and black sample tray for membrane, MC 300 Epi light set as standard, coded green/white light transilluminator, MD-20S 302nm UV transilluminator, built in 24V power for coded trans-light sample tray, a set of keyboard and mouse, 100-240V, 50/60Hz
1153039	Magic MP software for KETA MLX II, single user only
1153040	Magic MP software for KETA MLX II, three user keys
1151271	Trans Green light transilluminator for MLX II
1151272	Trans White light transilluminator for MLX II
1151273	Trans Blue light transilluminator for MLX II
1151311	Coded Black sample tray for KETA MLX II
1151312	Coded White sample tray for KETA MLXII
1151221	WK 301 emission filter 568-617nm, 46 mm
1151222	WK 302 emission filter 508-537nm, 46 mm
1151223	WK 303 emission filter 675-720 nm, 46 mm
1151224	WK 304 emission filter 710-730 nm, 46 mm
1151225	WK 305 emission filter 800-850 nm, 46 mm
1146002	UV radiation block cover for gel excision
1151261	MD-20S 302nm UV transilluminator for KETA MLX II
1151263	HD-20S 365nm UV transilluminator for KETA MLX II
1151265	MD-20DS 302/365nm dual wavelength UV transilluminator for KETA MLX II
1155032	External 20" LCD with touch panel
Option	
1146003	Digital thermal printer
1147007	Printer paper for thermal printer 5 rolls/pack
1147008	Color laser printer