



KETA M Family



COMPACT DESIGN

Small footprint that saves space in the cluttered lab environment



SMART IMAGING

Blend the marker image with the chemiluminescent sample image in a seamless workflow



SUPERIOR SENSITIVITY

Reduce the time waiting for your faint signal to appear



EASY IMAGE EXPORT

Export your images in a batch to your USB drive instantly

WHAT MAKES KETA M/ML THE IDEAL FLUORESCENT / CHEMILUMINESCENT IMAGING SOLUTION?

Compact Design with Maximum Flexibility

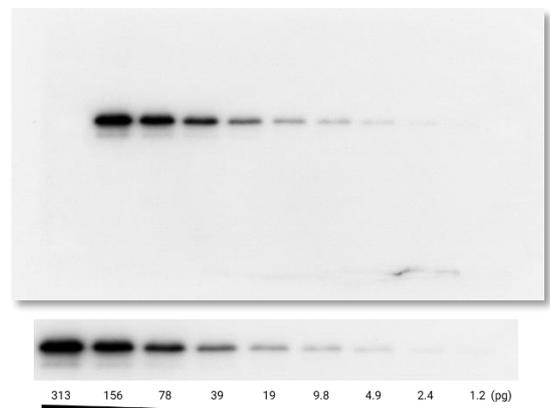
The KETA M/ML saves space and trouble even when you have to share the instrument with others. It consists of an integrated computer, a 12-inch touchscreen display, a tightly sealed darkroom, and a scientific grade camera in a small footprint. The simple sample tray placement minimizes the lens adjustment process. Needless to say, the highly sensitive camera can even capture the sample blot in a container without sacrificing the performance thanks to the tightly sealed darkroom and the excellent calibration process.

Smart Intuitive Software Design

The KETA M/ML comes with the brand-new Magic Plus software which has been designed for ease of use based on the customer feedbacks. From capturing the images to exporting the images to your laptop, the Magic Plus simplifies the complicate processes under just a few clicks. In the image acquisition process, the software automatically blends the marker Image with the chemiluminescent sample image and generates a combined image for users to export. As soon as users have acquired their images, they can easily export them, whether in a batch or a single combined image with the marker image overlay, to their USB drives instantly.

Applicable to chemiluminescent and fluorescent imaging

The M/ML consists of high dynamic range Peltier cooled 9.1 Megapixel camera, auto focus f0.95 lens, six position filter wheel for western blot application with both Chemiluminescent and fluorescent image capture. It is the state of art in the market, bring operator the most convenient and cost effective system in protein detection field.



Two-fold dilution series of purified human transferrin from 625 pg to 2.4 pg

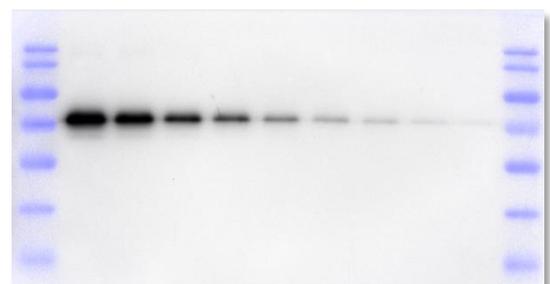


Image blending with the marker image with Auto Coloring

Picogram Dynamic Range Sensitivity

The KETA M/ML is capable of detecting picogram level of protein content within seconds. Often times users have to wait for the faint signal to appear and sacrifice the resolution with the binning function. The KETA M/ML eliminates the waiting time and complicated binning options thanks to the highly sensitive scientific grade camera. The large size camera chip integrated with the Peltier cooling technology guarantees users to capture images with wide dynamic range and low noise. The system detects <2.4 picogram of purified human transferrin within 30 seconds. With these results shown here, you can capture your western blot images with confidence and trust.



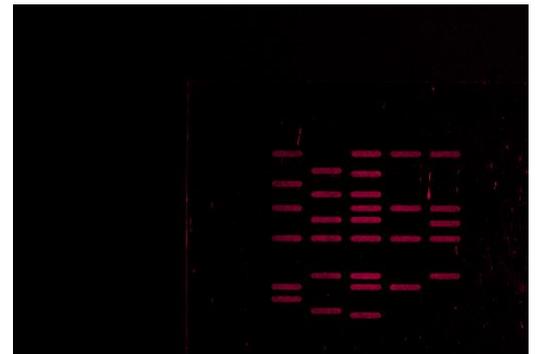
Fluorescence image Alexa Fluor 488

User-friendly software interface

The M/ML is equipped with most advanced user-friendly human machine interface for either routine or personal laboratory use, operator management function directly records and controls every test or experiment for core facility. The M/ML supports data and result transfer via memory stick or Wi-Fi to target host or personal computer. Magic Plus software package as standard with KETA M series.

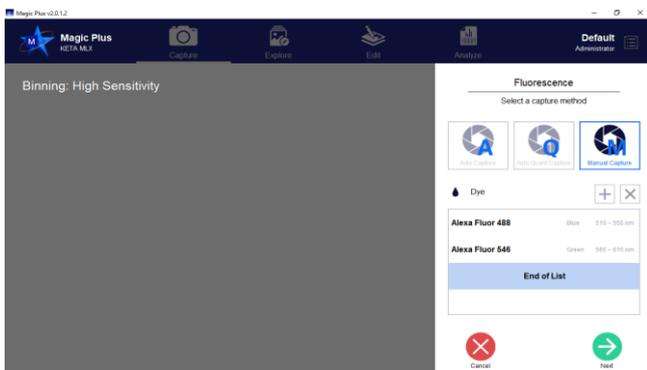
Powerful Image enhancement functions

The preset methods in M/ML bring operators quick method selection to get optimal result any time, professional mode enable operator to create their own method by adjusting the parameter and recall for next experiments. Image Edit functions such as image rotation 0-15°, export files to various file formats, brightness, contrast adjustment, and etc. allow user to enhance their image quality. The professional report export is one of the important features.



Fluorescent image Alex Fluor 680

Magic Plus software



Select light source for specific dye



Compare images

MC 300 supports versatile fluorescent western blotting

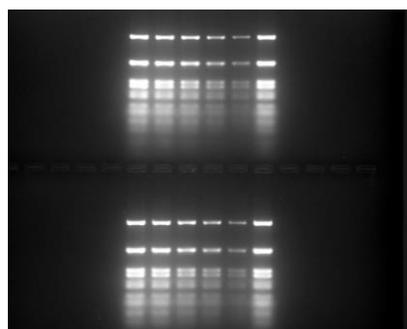
MC 300 Epi light set includes eight pieces of Hi- power LED covering Wavelength from 400nm to NIR (780nm) for all fluorescent dye excitation on western blot application. Operator choose either the dye or the excitation wavelength, the M/ML will automatically turn on the LED and drive the Emission filter to correct position by preset program without additional steps.



Blue light for Alexa Fluor 488 dye

Trans-green light sample tray

Trans-green light sample tray enables safe dye gel imaging.
Optional Trans-blue or Trans-white light sample tray are also available.



SYBR Green Stained Gel Image by Trans-green light sample tray

Filter Selection Guide

Filter type	Em (nm)	Commercial fluorescence dye
WK301	540-630	Coomassie Blue, EtBr, SYBR Green, SYBR Gold, SYPRO Ruby, SYPRO Orange
WK 302	515-531	Alexa Fluor 488, Alexa Fluor Plus 488
WK 303	564-618	Alexa Fluor 546, Alexa Fluor Plus 555
WK 304	675-719	Alexa Fluor 647, Alexa Fluor Plus 647
WK 305	706-727	Alexa Fluor 680, Alexa Fluor Plus 680

Specification

Model	KETA M	KETA ML
Camera depth	16bit	
Dynamic Range	>4.0	
Operation temperature	0-60°C	
Chip size	1"	
Resolution	9.1M pixels	
Communication	Wi-Fi, Ethernet, USB	
Binning	2X2, 4X4, 8X8	
Pixel Size	2.4um x 2.4um	
Cooling	Peltier, 40°C below ambient	
Lens	Auto focus f0.95 / 25mm	
Filter Wheel	Six positions (43mm)	
Internal light source	MC 300 (White light only)	MC 300/400nm to NIR
Filter	WK 301	WK301-WK305
Black / White Sample Tray	For Chemiluminescent / Fluorescent blot imaging	
Trans Green light Sample Tray	For Transparent Gel imaging	
Magic Plus software	Magic plus Basic / Magic plus Standard	
OS system	MS Windows 10	
Physical dimensions and Weight	400 x 330 x 580mm (WxDxH) ; 20 kg	
Power	100 – 240V, 50 – 60Hz	
Optional		
External Touch Screen	20" LCD Screen with touch panel	
Thermal printer	Digital	

*Upgrade package for KETA M to KETA ML includes Epi-light with software package, filter set (WK302-Wk305).

**The spec is subject to change without prior notice.

Professional Reporting

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

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

Institute: Wealtec Bioscience Co., Ltd.
 Laboratory: Research and Development

Creator:
 Print date: 2021/01/29 10:12:18

WEALTEC KETA M Fluorescent Imaging system

Imaging System Information

System	KETA M	Software	Magic Chemi
Serial Number	Wx2012L03C2.1	Software Version	2.0.0.4

Image Information

File Name	Normal-Auto(1)-20201222.efn	Operator	
Image Depth	16-bit	Capture Date	2020/12/22 8:55:14
Pixel Count	521,381	Image Size (pixel)	1477 x 353
Image Display	Inverted	Exposure Method	Auto Exposure
Capture Method		Exposure Time	62.640 sec
Binning	Normal	File Location	C:\Users\jynn\Desktop\Demo Archive\RD Good\WB62_Sog_Zkd\luton

Image Name: Normal-Auto(1)-20201222



Area Density Analysis Report

Spot ID	Total density	Total density - background	Max. Intensity	Min. Intensity	Quantity (%)	Area (pixels)
1	1675.408	1574.752	0.601	0.019	100.000	9306
2	911.509	810.853	0.335	0.012	54.405	9306
3	428.458	327.844	0.146	0.006	25.573	9306
4	224.218	124.230	0.071	0.004	13.383	9306
5	158.724	60.447	0.048	0.004	9.474	9306
6	117.592	23.057	0.154	0.003	7.019	9306
7	92.648	5.494	0.021	0.001	5.530	9306

Ordering Information

Catalog Number	Description
1150051	KETA M, chemiluminescent & fluorescent imaging system complete include in-build SBC, 12" touch screen, 9.1M pixels cooled camera, f0.95 Autofocus lens and a WK301 filter, 6-position filter wheel, B/W sample tray, trans green light sample tray, MC 300 White light only, Magic Plus Basic software, Wi-Fi and a set of keyboard and mouse. 100-240V, 50-60Hz.
1150052	KETA ML, chemiluminescent & fluorescent imaging system complete include in-build SBC, 12" touch screen, 9.1M pixels cooled camera, f0.95 Autofocus lens and WK301-WK305 filters, 6-position filter wheel, B/W sample tray, trans green light sample tray, MC 300 light source, Magic Plus software, Wi-Fi and a set of keyboard and mouse. 100-240V, 50-60Hz.
1153030	Magic Plus Software for KETA M/ML, One user key
1153031	Magic Plus Software for KETA M/ML, Three user keys
1151221	WK 301 emission filter 540- 630 nm
1151222	WK 302 emission filter 515-531nm
1151223	WK 303 emission filter 564-618 nm
1151224	WK 304 emission filter 675-719 nm
1151225	WK 305 emission filter 706-727 nm
1155032	External 20" LCD with touch panel
1153040	Upgrade package KETA M to ML includes Epi light, software package, and filter set.

Accessories

1146003	Digital thermal printer
1147007	Thermal paper 5 rolls/pack

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