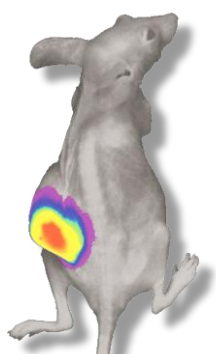


just as it is . . .

LUCI

Luminescence *In Vivo* Imaging System



 **NEO**
Science

LUCI is a device that can image and analyze Luminescence signals from tissues and organisms. Using an optimized camera for macro-imaging, LUCI can obtain intuitive and high-quality images. NEOimage program providing with LUCI analyzes luminescence images easily. LUCI has a simple design, is easy to use, fast and reliable.

Highly Sensitive Camera Sensor

LUCI's uses the highly innovative 1 Megapixel, back-illuminated CCD cameras, offer single photon sensitivity across a large field of view, at 26 fps.

With a 1024 x 724 sensor format and 13 μm pixel size, the resolving power, field of view and unparalleled speed of the camera sensor render it the most attractive and versatile CCD option for In Vivo imaging applications.

Active pixels	1024 x 724
Pixel size (w x h; μm)	13 x 13
Image area (mm)	13.3 x 13.3
Max readout rate (MHz)	30
Frame rates (fps)	26
Read noise (e-)	< 1
QE max	95%

Simple

LUCI is structured as simple and optimal for quick and easy installation. It is also easy to move, manage, and maintain.

The LUCI has a compact size (30 x 30 x 51 cm), so it is ideal for small spaces. Due to its convenient size and portability, it can be used for a wide variety of applications.

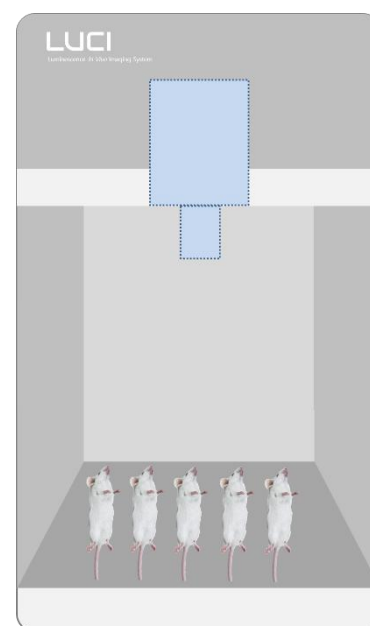
Quick Imaging

Determining an appropriate exposure time is sometimes difficult. The process of determining the exposure time, capturing the images, merging the bright image and signal image is just a click away.

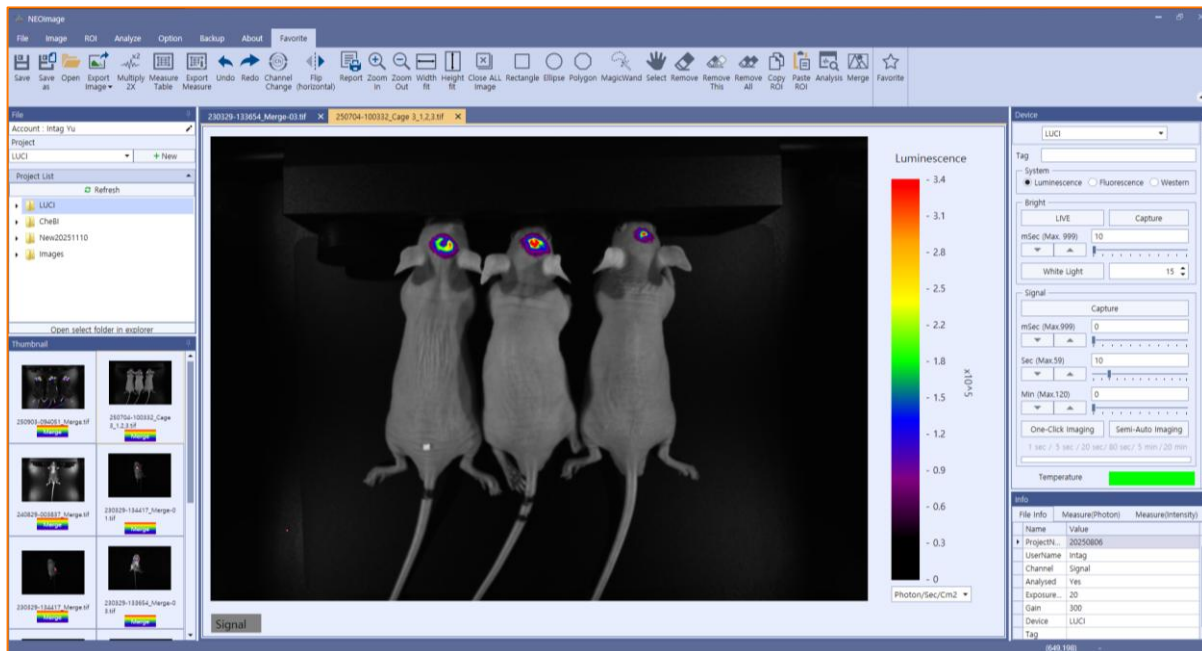
You don't have to worry about it and just click it once, because the quantification is done after calibrating for various conditions.

Easy to Use / Compact

Hardware and software are user-friendly. Camera and LED light are controlled by imaging program. All of functions - live window, adjust exposure time and gain, capture, quantitation and merging image are simple and intuitive.



Simple structure faithful to functionality.

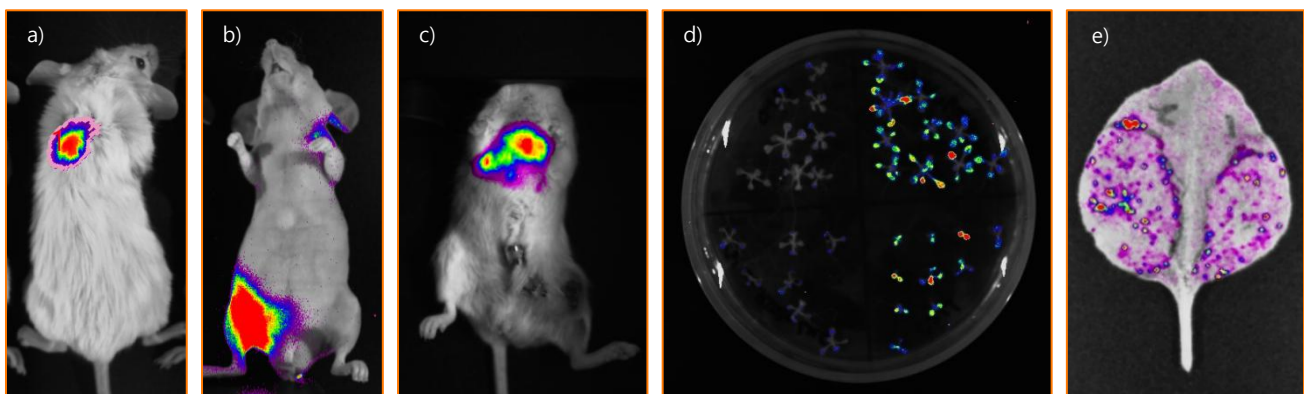


Photon data / Intensity data

LUCI uses an ultra-sensitive image sensor to detect even extremely weak bioluminescent signals. It quantifies the emitted light by converting it into photon counts, enabling accurate measurement. By analyzing the number of photons per unit area and per unit time, LUCI allows direct comparison of quantitative data across different time points. It also provides pixel-level and intensity-level measurements, making it easy to compare samples under identical imaging conditions.

One-Click Imaging

This function automatically allows the program to measure the appropriate exposure time, obtain the signal image, and then take bright photos and merge them. By automating the entire image acquisition process, you can obtain images with exposures that are neither too short nor too long. Furthermore, automatic image saving provides a convenient imaging process. The Report feature includes images, capture settings, and quantitative tables, allowing you to organize your data efficiently.



a), b), c) Tumorization experiments. d) Gene expression in Arabidopsis. e) Gene expression in plant leaf.

Specification

Image Sensor	CCD sensor
Resolution	1024 x 724
Frame rate	Up to 26 fps
Quantum Efficiency	95% max
Cooling	-80°C
Pixel Size	13 x 13 μ m
Digital Output	16-bit
Aperture	Physical
Interface Connector	USB 3.0
Stage Heating	Yes
Capacity (Mouse)	5
Field of View	235 x 180 mm
Weight	23 Kg
Size (W x D x H)	300 x 300 x 510 mm