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Herolab

ChemoLum

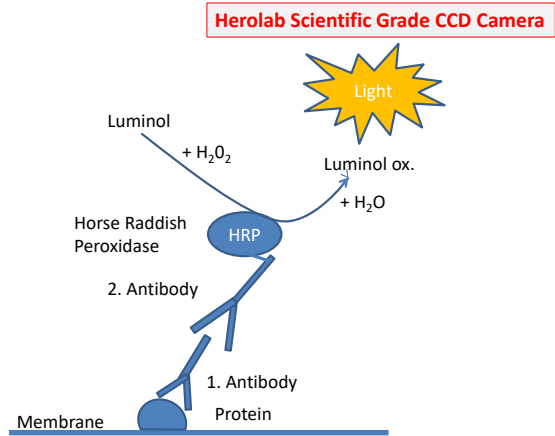
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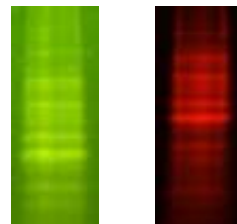
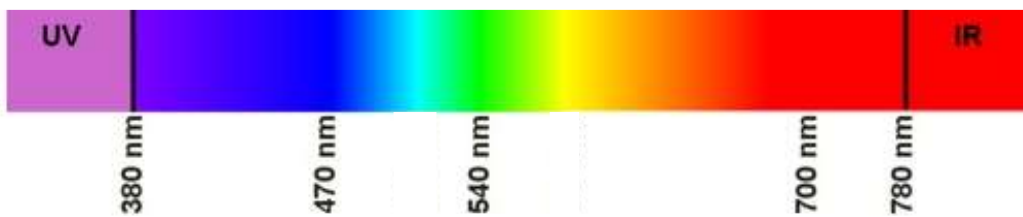
➤ ChemoLum 8300

Imaging System

Chemiluminescence



Multiplex Fluorescence



Dyes: C3 + Cy5

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IMAGING-SYSTEM

Module Cat.-No.: #	Method	Source of Illumination	Illumi- nation	Dyes - Examples
Base Unit: Darkroom Hood + Scientific Grade CCD Camera + Software E.A.S.Y Win modules A+, B, C				
ChemoLum 8300 # 28 30 000	Chemiluminescence Western Blots Southern and Northern Blots	no	no	Luminol reaction
Transilluminators → Gels				
Module: WL White Light LED # 28 75 280	Coloring of gels PAGE Polyacrylamide Gel Electrophoresis	White Light LED transilluminator	White light	Coomassie Blue Silver, Zinc, Copper
Module: RGB Red-Green-Blue # 28 30 400	Fluorescence DIGE Differential Imaging Gel Electrophoresis (Multiplexing)	RGB-LED-Transillu- minator	Red Green Blue White	Cy 5, Alexa Fluor 647, DyLight 649 Cy 3, Alexa Fluor 532, DyLight 549, Rhodamin Cy 2, Alexa Fluor 488, DyLight 488, Fluorescein, Qdot 525 SYBRGreen, Gel Green Coomassie Blue, Silber, Zinc, Copper
Module: UV High Contrast UV # 28 70 125	Fluorescence	High Contrast UV- Transilluminator 302/312 nm	UV 302/312 nm	SYPRO Ruby/Orange/ Red/Tangerine, Coomassie Fluor Orange, Oriole, Q-dots, Stain Free Ethidiumbromide, Gel Red, Gel Star
Module: BL Blue Light LED # 28 78 280	Fluorescence	Blue Light-LED- Transilluminator	Blue light	Proteins see RGB Blue SYBRGreen/Gold/ Safe, Gel Green
Epi Modules → Gels and Blots				
Modules: Epi UV # 28 30 365 # 28 30 312 # 28 30 254	Fluorescence	Epi-UV-Module both sides Each side with 2 tubes of same wavelength	365 nm 312 nm 254 nm	Q-dots see UV- Transilluminator Oriole
Module: Epi RGB # 28 30 100	Fluorescence	Epi-RGB-LED- Module Both sides	LEDs	see RGB-LED- Transilluminator

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The Imaging System **ChemoLum 8300** is a system which can be individually adapted with different modules of illumination according to the needs and wishes of the customer. It is possible to do chemiluminescence as well as multiplex fluorescence detection up to a gel size of 24 x 30 cm.

An overview of the different illumination modules can be seen on page 2.

The System ChemoLum 8300 is especially designed for detection of weak signals.

- The system consists of an absolutely lighttight housing with black inside though very weak signals can still be detected.

ChemoLum 8300	Scientific Grade CCD Camera: Monochrome or Color, 16 bit Multiplex -Images are possible, Kodak-Chip 8,3 Mega-Pixel, Pixel size: 5,4 μm x 5,4 μm , Binning 2 x 2, 3 x 3 and 9 x 9 possible, one stage Peltier cooling: $\Delta T = -40$ °C
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- **A Scientific Grade CCD camera** with 16 bit and 8,3 Mega-Pixel which can be cooled 40° beyond room temperature guaranties with big pixel size and binning function (condensing of pixel to one Superpixel) high sensitivity.
- An outstanding **fixed lens with f: 1:0,8** improves the sensitivity. A zoom lens is not suitable for weak signals.

Handling of the camera and the filter wheel:

- The zoom function is given by changing the height position of the camera. The maximum gel size of this system is 24 x 30 cm.
- Aperture and Focus are motorized and are software controlled.
- Four presets can be stored and individual setting is possible as well
- The filter wheel has 5 positions. One position remains free for chemoluminescence detection. The positioning of a filter is also software controlled. Following optical filters are available:

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Table: Optical filters for ChemoLum 8300

Cat. No. 28 08 753	535 nm
Cat. No. 28 08 759	590 nm
Cat. No. 28 08 762	620 nm
Cat. No. 28 08 767	670 nm

The filter # 28 08 759 will be included in the base unit.

Size of image:

- **Max. size: 28 x 22 cm**
- **Min. size: 9,0 x 6,5 cm**

Software:

- ◆ **E.A.S.Y® Win Basic-Software Module A**
 - **Camera control**
 - Import-/Export-Function,
 - Annotating
 - and other (Please, see extra brochure)
- ◆ **E.A.S.Y® Win Analysis Software Modules**
 - Modul B – Molecular weight and volume analysis
 - Modul C – Spot-2D-Analysis of single bands or spots

The software is GLP conform.
For other modules, please see extra brochure.

Dimensions: w 60 cm x d 50 (58) cm x 86,5 (92) cm (when door is open)