



Cell Imaging

Cell Imaging

Bio-Rad's suite of tools for fluorescence microscopy and cell imaging includes the ZOE fluorescent cell imager and nuclear dyes.

See Also

- PureBlu Hoechst 33342 nuclear staining dye: page 49.
- PureBlu DAPI nuclear staining dye: page 50.
- ReadiLink antibody labeling kits: page 41.
- VivaFix cell viability assays: page 42.
- Cell proliferation assay: page 44.

ZOE™ Fluorescent Cell Imager

The ZOE fluorescent cell imager is a complete imaging system that is suitable for routine cell culture and imaging applications. It eliminates the complexities of cell imaging by combining the ease of use of a personal tablet with the power of an inverted microscope. An intuitive Android-based touch-screen interface is used to control brightfield, three fluorescence channels, and the integrated digital camera.

As a fully integrated system with long-life light-emitting diodes (LEDs), the ZOE cell imager is a robust imaging device ready for intensive daily use. There are no time-consuming setup and hardware adjustments to perform (optical and illumination alignment, changing filter sets or objective lenses) or parts with a limited life span that could result in costly maintenance (replacing mercury arc lamps).

The ZOE cell imager uses high-quality hard-coated filter sets that provide higher light transmission and long life. Its 20x plan achromatic objective lens is mounted in a proprietary manner, resulting in a wide field of view (0.70 mm²) that is ~180% greater than that of a traditionally mounted 20x objective lens. When zoomed out it is approximately equivalent to that of a 4x objective. When needed, use the pinch-to-zoom gesture to magnify up to 20x by digital zoom while retaining resolution (1 μm).

Product features include:

- **Simplified cell imaging** — the intuitive touch-screen interface allows users to view cells, capture images, and create multichannel merges
- **Flexible system** — brightfield and three fluorescence channels enable use for routine cell culture applications as well as more sophisticated imaging applications
- **Fluorescence at your bench** — an integrated light shield permits fluorescence imaging in ambient light



ZOE Fluorescent Cell Imager

- **Robust construction** — fully integrated system with long-life LEDs is ready for intensive daily use
- **LED light sources** — thousands of hours of illumination that are instantly ready after power on
- **Large field of view** — the motorized stage and large field of view allow you to see more of your sample, faster
- **Small footprint** — compact size accommodates crowded laboratory benches

For More Information

Web: bio-rad.com/ZOE

Request or download bulletin: 6585

Ordering Information

Catalog #	Description
1450031	ZOE Fluorescent Cell Imager, 120–240 V, includes instrument, power supply, USB flash drive

Kits and Reagents for Cell Imaging

Bio-Rad offers a variety of kits and reagents for use with the ZOE fluorescent cell imager.

Ordering Information

Catalog #	Description
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Nuclear Staining Dyes

1351303	PureBlu DAPI Nuclear Staining Dye , pkg of 1, includes 5 x 50 µg vials of DAPI powder
1351304	PureBlu Hoechst 33342 Nuclear Staining Dye , pkg of 1, includes 5 x 56 µg vials of Hoechst 33342 powder

Antibody Labeling Kits

1351001	ReadiLink 350/440 Antibody Labeling Kit , includes 2 vials of labeling dye, reaction buffer, and dyed quench buffer for labeling 2 x 50 µg of antibodies
1351002	ReadiLink 492/516 Antibody Labeling Kit , includes 2 vials of labeling dye, reaction buffer, and dyed quench buffer for labeling 2 x 50 µg of antibodies
1351003	ReadiLink 555/570 Antibody Labeling Kit , includes 2 vials of labeling dye, reaction buffer, and dyed quench buffer for labeling 2 x 50 µg of antibodies
1351004	ReadiLink 594/610 Antibody Labeling Kit , includes 2 vials of labeling dye, reaction buffer, and dyed quench buffer for labeling 2 x 50 µg of antibodies

Fixable Viability Dyes

1351111	VivaFix 353/442 Cell Viability Assay , pkg of 1, kit includes 4 x 50 assay vials and 250 µl of DMSO, for running 200 assays
1351115	VivaFix 498/521 Cell Viability Assay , pkg of 1, kit includes 4 x 50 assay vials and 250 µl of DMSO, for running 200 assays
1351116	VivaFix 547/573 Cell Viability Assay , pkg of 1, kit includes 4 x 50 assay vials and 250 µl of DMSO, for running 200 assays
1351117	VivaFix 583/603 Cell Viability Assay , pkg of 1, kit includes 4 x 50 assay vials and 250 µl of DMSO, for running 200 assays

PureBlu™ Hoechst 33342 Nuclear Staining Dye

PureBlu Hoechst 33342 nuclear staining dye is a highly pure formulation of Hoechst 33342 fluorescent dye. It is available in a user-friendly format that allows easy preparation of the working solution without any weighing step and with a single dilution after resuspension. PureBlu Hoechst 33342 dye permeates cell membranes and binds double-stranded DNA, which enables identification of nuclei within cells. It has a maximum excitation wavelength of 350 nm in the ultraviolet range and can be optimally detected in the blue channel with a maximum emission wavelength of 461 nm.

Product features include:

- Easy to reconstitute without any weighing step
- Only 1-step dilution after resuspension
- Compatible with multicolor experiments



For More Information

Web: bio-rad.com/PureBluHoechst33342
Request or download bulletins: #10043283 and 6607

See Also

ReadiLink antibody labeling kits: page 41.
VivaFix cell viability assays: page 42.
Cell proliferation assay: page 44.

Ordering Information

Catalog #	Description
1351304	PureBlu Hoechst 33342 Nuclear Staining Dye , pkg of 1, includes 5 x 56 µg vials of Hoechst 33342 powder

PureBlu™ DAPI Nuclear Staining Dye

PureBlu DAPI nuclear staining dye is a highly pure formulation of 4',6-diamidino-2-phenylindole dihydrochloride (DAPI) fluorescent dye. It is available in a user-friendly format that allows easy preparation of the working solution without any weighing step and with a single dilution after resuspension. PureBlu DAPI dye permeates cell membranes and binds double-stranded DNA, which enables identification of nuclei within cells. It has a maximum excitation wavelength of 359 nm in the ultraviolet range and can be optimally detected in the blue channel with a maximum emission wavelength of 461 nm.



Product features include:

- Easy to reconstitute without any weighing step
- Only 1-step dilution after resuspension
- Compatible with multicolor experiments

For More Information

Web: bio-rad.com/PureBluDAPI

Request or download bulletins: #10043282 and 6607

Ordering Information

Catalog #	Description
1351303	PureBlu DAPI Nuclear Staining Dye, pkg of 1, includes 5 x 50 µg vials of DAPI powder

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