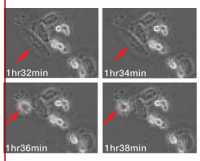
An impressive combination of live cell imaging and monitoring for powerful long term time-lapse imaging

The compact BioStation IM cell incubation and monitoring system allows for sophisticated time-lapse imaging without advanced programming or complex tools. A highly integrated microscope and cooled CCD camera are perfectly adapted to provide highly stable phase and fluorescence images of exceptional quality, and an environmental incubator precisely controls temperature, humidity and gas concentration for virtually any live-cell application including cell growth, morphology and protein expression.

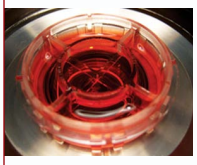
Environmental Stability

BioStation IM automatically maintains a stable internal environment of 37°C, a humidifier to maintain humidity levels of 95% or higher, and a CO_2 gas mixer for a stable supply of 5% CO_2. Optional autoclavable perfusion accessories permit reagent addition and media exchange without disturbing the culture environment.



Versatile Time-Lapse Imaging

The BioStation IM's phase contrast and fluorescence imaging modes are automated. Since all optical and mechanical components are motorized, multichannel, multipoint, Z-stack and magnification changes are all possible during time-lapse imaging. The objective may be moved in X-, Y- and Z-axis directions, so a broad 6mm x 6mm area can be observed without disturbing the culture dish.

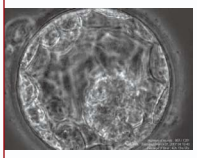


Multi-Sample Observation

Nikon's specialized Hi-Q4 culture dish is divided into four segments for multi-sample observation. This optional dish also features an incorporated plane parallel top plate to prevent light path distortion by the meniscus and enables high-quality phase contrast observation.

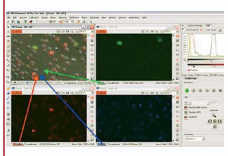
Two Versions for Optimal Image Quality

BioStation IM CELL S1 is used with a single glass bottom 35mm dish and has a 40x 0.8 NA Plan Fluor objective, yielding magnifications of 20x, 40x, and 80x. BioStation IM CELL S1-P is for use with a plastic dish and magnifications of 10x, 20x and 40x are obtained via a 20x 0.5 NA Plan Fluor objective. This objective has a correction collar to correct for spherical aberrations caused by different dish thicknesses.



Camera Options

Two camera options are available– either the high-sensitivity Nikon DS-2MBWc, or the ultra-high quality, high-sensitivity monochrome Nikon DS-Qi1.



Simple, Complete Operation From a PC

The system software features automated time-lapse capabilities, including real-time image review and correction. Export (jpg, tiff, avi) and import to Nikon NIS-Elements imaging software is also possible, as well as full 6D (Z, Y, Z, lambda, T, multipoint) multidimensional acquisition and analysis.

To see how the BioStation IM delivers all of these features, contact your local Nikon representative, call 1-800-52-NIKON, email biostation@nikon.net or visit www.nikonbiostation.com

Nikon

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