Olympus CKX53 Trinocular Inverted Microscope, Integrated Phase Contrast & Inversion Contrast

Product Code: OLYK23009073

Brand: Olympus

Olympus' CKX53 Trinocular Inverted Microscopes, Integrated Phase Contrast & Inversion Contrast represents the perfect solution for cell culture in which a variety of cells are grown under controlled conditions thanks to its easy and quick operation combined with excellent optical performance, optimal working distances and various contrast methods. With a slim and compact design, centring free phase contrast and optional fluorescence capability, all kinds of live cells checks can be easily and quickly performed.

This microscope has been designed from the ground up to be the best microscope available for routine inverted microscopic analysis. The combination of excellent optical performance and mechanical quality results in a microscope system of outstanding value and comfort for regular use. Features such as the pre-centred contrast and inversion contrast (IVC) enable users to design their own system, to match their applciation, with ease.

Features

- **Fast and Efficient Cell Observation with the Integrated Phase Contrast (iPC) System:** The high contrast achieved by the CKX53 iPC system quickly provides a clear view without needing to change the ring silt from the 4x to 40x objective. Performing simplified and efficient cell observation, for faster cell culture operations is made possible.
- **Clear View Empowered by Long-Life LED Light Illumination:** Lasting longer than halogen bulbs, the energy-saving LED light source of the CKX53 delivers reliable colour reproducibility as well as a uniform and clear image over the whole visual field with a field number (FN) of 22. The energy-saving performance of CKX53 guarantees a clear and stable view.
- **Wide and Clear View with the 2x Objective:** The ring silt for the PLN2x objective, CKX3-SLPAS, has a 22mm field of view of 11mm diameter. As a result, observation using the objective is perfect for efficient screening of the desired cells, allowing a faster cell culture process. Additionally, the 2x objective provides noticeably higher contrast, allowing even transparent objects in the sample to be clearly identified.
- **Experience 3D Views Driven by the "Inversion Contrast" (IVC) Technique:** With the use of this newly-developed IVC technique in CKX53, where the depth of field is narrower than that of the phase contrast, clear three-dimensional images can be obtained for objects of any shape, even transparent ones. In addition, IVC observation provides clear views without halos or directional shadows,
preserving the integrity of object details during observation. 10x objectives (PLCN10x, CACH10XIPC) are lined up for this new IVC observation.
- **Smooth Cell Observations in Sterile Conditions:** With the hood kept down, CKX53 fits perfectly in a clean bench environment, allowing cell handling under completely sterile conditions. With its UV-resistant coating, CKX53 can also be left in the clean bench during the UV light sterilization process. Compared with previous CKX models, CKX53 weighs approximately 7kg and has a smaller base footprint. It can easily be moved with just one hand, using the neck of the observation tube for lifting as well as the sliding pad at the base of the microscope.
- **Easy Cell Sampling in a Clean Bench Environment:** The shorter distance between the view point and the optical axis/focus knob on CKX53 offers natural hand positioning and makes focusing and cell sampling easier. Additionally, with full LED lighting available from the moment CKX53 is turned on, operation is less of a burden to the user, and cell sampling and handling can be finished in a shorter period of time.
- **Ergonomic Advantages for Easy and Smooth Operation:** Whether observing in a standing or seated position, the 45-degree optical access and the placement of the butterfly-shaped observation tube against the stage allows for ergonomic cell observation. Sterile work can be quickly started and finished, allowing cells to be returned to the incubator in a shorter time. Additionally, the power switch is placed directly under the observation tube located along the stage. The operating components such as the power switch and the knob for switching the light path are placed close together to enhance the operability of the CKX53.
- **Easy Handling of Any Type of Cell Culture Containers:** Using the universal holder with CKX53, it is possible to easily view cells that were cultured in a variety of containers, such as dishes, microplates, and flasks. Also, when the optional holder is attached, a maximum of three 35mm dishes can be accommodated on the stage. Microplates can be handled without a holder, and the well "address" of the
microplate can be identified quickly using the grid for each well position on the CKX3-MVR manual stage. When viewing a 96-well plate, each 90-degree rotation of the stage knob moves the well position one at a time, allowing intuitive handling of the microplate during observation.
- **More Comprehensive Observation for a Multi-Layer Tissue Flask:** Due to the width of CKX53, when the condenser is detached it is possible to view containers such as multi-layer tissue flasks up to 190mm in height. In addition, the objectives can be lifted up to 19mm, allowing cell observation of the bottom two layers of a multi-layer tissue flask in combination with the PLCN4X objective.

Specifications

Optical Head	Trinocular with photo port, angled at 45°, 100:0, 0:100 split
	Interpupillary Distance Adjustment: 48 to 75mm
	Dioptric adjustment on both eyepieces
Eyepieces	10x/22mm, super wide-field
Nosepiece	Quintuple nosepice with click stop
Objectives	4x, 10x, 20x, 40x LWD Phase Contrast
Condenser	Abbe Condenser, NA 1.25
	Inversion Contrast
	Pre-centred phase slider with single phase ring for 4x, 10x, 20x, 40x plus two BF positions
	Iris diaphragm
Stage	Plain stage, 252 x 200mm, with exchangeable transparent plate
	Mechanical stage, 180 x 70mm with microplate holder
	110 x 74mm movement, Vernier scale
Focusing Knobs	Coaxial coarse and fine with stop
	Tension control on coarse focus
Mains Power	100 - 240V/50 - 60Hz
Illumination	4W LED with intensity control
Supplied With	Power cord and cover

Unit 3, Tower Business Park
Warpsgrove Lane
Chalgrove
Oxfordshire
OX44 7XZ

Tel: (+44) 01865 400321

Email: enquiries@medlinescientific.com
Website: www.medlinescientific.com