



# ECLIPSE *Ti2*-U Inverted Microscope for ICSI



Shedding New Light  
On **MICROSCOPY**

# Superior optical performance and precision for ICSI

Nikon microscopes have played a significant role from the early days of Intracytoplasmic Sperm Injection (ICSI) and continue to contribute to the advancement of this field through superior optical performance and precision.

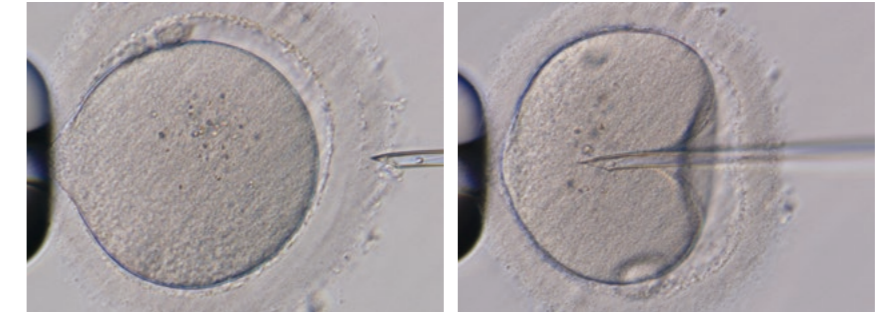
The ECLIPSE Ti2-U IVF EU/US provides an ultra-stable platform for performing precision manipulation procedures such as ICSI. The intermediate magnification switching function (1.5X) allows easy switching of observation magnification without changing objectives.



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Actual product may vary.

## Nikon Advanced Modulation Contrast (NAMC) observation

The Nikon Advanced Modulation Contrast (NAMC) technique enables high-contrast observation of colorless and transparent samples through plasticware. NAMC produces a pseudo-relief shading effect, ideal for ICSI. The direction of shading can be adjusted through 360 degrees by turning the modulator in a NAMC objective. CFI S Plan Fluor ELWD NAMC objectives are equipped with a modulator ring clamping mechanism to prevent accidental rotation of the modulator ring while rotating the correction collar.



A sperm cell can be clearly observed in the injection pipette  
Images courtesy of: Derek Keating, B.A. and Gianpiero D. Palermo, MD, PhD., Andrology and Assisted Fertilization: Weill Cornell Medicine Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine.



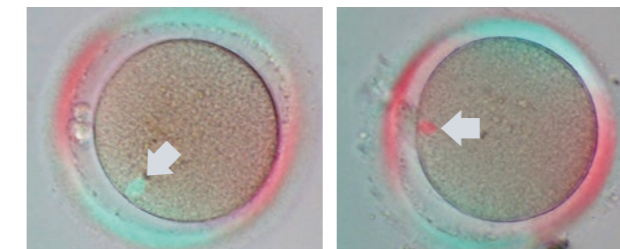
CFI S Plan Fluor ELWD NAMC 20XC (left), CFI S Plan Fluor ELWD NAMC 40XC (right)  
CFI Achromat NAMC 10XF (left), CFI Achromat LWD NAMC 20XF (middle), CFI Achromat LWD NAMC 40XC (right)

## Spindle observation

This polarized light technique enables finely detailed observation of spindle bodies for oocyte assessment and the elimination of spindle damage during sperm injection.

Switching between spindle observation and NAMC is fast and easy.

The following objectives are compatible with spindle observation: CFI S Plan Fluor ELWD NAMC 20XC and CFI S Plan Fluor ELWD NAMC 40XC.



Spindle bodies (indicated by arrows) observed in different colors depending on their orientation. The color can be changed from blue to red by rotating the condenser module 90 degrees.



T12-C-SO Spindle observation system



# Specifications

| Model name                   |   | ECLIPSE Ti2-U IVF EU  | ECLIPSE Ti2-U IVF US   |
|------------------------------|---|---|--|
| Main Body                    | Optical System  | Infinity-corrected CFI60  |  |
|                              | Field Number  | 22 with C-mount, 25 with F-mount  |  |
|                              | Intermediate Magnification Switching  | Manual switching of 1.0x/1.5x   |  |
|                              | Output Port   | 4 Manual positions<br>Eyepiece 100%, left 100%, right 100%, eyepiece 20%/left 80%   |  |
|                              | Focusing Unit   | Manual drive, Coarse/Fine focusing knob, Focusing stroke: 10 mm   |  |
| Tube                         | • TC-T-TS Binocular S tube (Field number 22)  |   |  |
| Eyepiece Tube Base           | • TI2-T-B5 S Eyepiece Tube Base Unit  |   |  |
| Eyepiece                     | • CFI 10X Eyepiece (Field number 22)  |   |  |
| Transmitted Illumination     | Pillar for transmitted illumination   | • TI2-D-PDI Pillar I for Dia Illumination<br>Condenser vertical stroke: 66 mm, Backward tilting up to 25 degrees, with field diagram and refocusing mechanism |  |
|                              | LED Lamphouse for Dia Illumination  | • TI2-D-LHLED LED Lamp House for Dia Illumination: High power LED   |  |
| Condenser                    | Condenser Turret  | • TC-C-TC Condenser Turret: 7 manual positions  |  |
|                              | Condenser Lens  | • TI-C NAMC Condenser Lens (O.D.=44 mm, NA=0.4)   |  |
|                              | Modules for Condenser Turret  | • TC-C-MN-10X NAMC 10X Module      • TC-C-MN-20X NAMC 20X Module<br>• TC-C-MN-40X NAMC 40X Module   |  |
|                              | Polarizer for NAMC Observation  | • TC-C-DICPNI NAMC/MSI Polarizer  |  |
| Stage                        | • TC-S-SRI Stage IVF<br>Stroke X: ±57 mm, Stroke Y: ±36.5 mm<br>• TI2-S-HL Long Handle  | • TC-S-SR Stage<br>Stroke X: ±57 mm, Stroke Y: ±36.5 mm<br>• TI2-S-HL Long Handle   |  |
| Nosepiece                    | • TI2-N-ND DIC Sextuple Nosepiece: 6 manual positions, Simple waterproof structure<br>• TI2-N-N Sextuple Nosepiece: 6 manual positions, Simple waterproof structure |   |  |
| Spindle Observation System   | • TI2-C-SO Spindle Observation System   |   |  |
| Adjustment Tool              | • C-T Centering Telescope   |   |  |
| Objectives (NA/W.D.) W.D.=mm | • CFI Achromat 4X (0.10/30.0)<br>• CFI Achromat NAMC 10XF (0.25/6.20)<br>• CFI Achromat LWD NAMC 20XF (0.40/3.10)<br>• CFI Achromat LWD NAMC 40XC (0.55/2.70-1.70)  |   | • CFI Plan Fluor 4X (0.13/17.20)<br>• CFI S Plan Fluor ELWD NAMC 20XC (0.45/8.20-6.90)<br>• CFI S Plan Fluor ELWD NAMC 40XC (0.60/3.60-2.80) |
| Power Cord and AC Adapter    | • Power Cord Type BE, 220-240V<br>• 4-AC AC Adapter   | • Power Cord Type BU, 100-120V<br>• I-AC AC Adapter I   |  |
| Operating Environment        | Temperature: 0°C+40°C, Humidity: 60% RH max. (at +40°C, no condensation), Indoor use only   |   |  |

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## WARNING

TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

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\*Products: Hardware and its technical information (including software)



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