

CellCut Plus Microdissection

The cleanest cut in laser microdissection



Key Features

- Ultra precise and versatile system
- Outstanding optical quality
- Provides high quality starting material
- for sensitive downstream analysis
- Intuitive and powerful UV Cut software

Name	Description	Article code
IX71S8F-3	Manual inverted frame with left-side tilted sextuple nosepiece, field number 22 and light-path prism to left-side image port (80%). For transmitted and reflected illumination. Coarse and fine focussing knobs with maximum focus stroke of 9 mm and 100 μ m stroke per full rotation of the fine focus knob. Minimum fine graduation 1 μ m. Front control of the external light power supply. With integrated magnification changer 1.0x and 1.6x. Prepared for control of external devices via TTL pulse control switch. Cable to connect frame and external Olympus light power supply included.	N1509400
IX81S8F	Motorised inverted frame with left-side tilted motorised sextuple nosepiece, field number 22 and motorised light-path prism to left-side image port (80%). For transmitted and reflected illumination. Motorised internal Z-drive with 0.01 µm minimum step size. Coarse and fine focussing knobs with maximum focus stroke of 9 mm. Minimum fine graduation 0.1 µm. Programmable frame keys for Z-focus escape/return, coarse/fine switching, changing of the lightpath prism and light intensity control. Indication of light intensity via front LED display. External control of microscope functions via handswitch and/or PC (RS232 communication). Cables to connect frame and IX2 controlbox included.	E0432000

Microdissection Components

Name	Description	Article Code
Laser	Solid state UV-A laser for cutting and isolation of target samples, 355 nm, pulse duration smaller 500psec, with repetitionrate bigger than 5KHz, maintenance free, guaranteed lifespan 5000 hrs. or minimum 1 year, 10.000 hrs. expected Fixed beam aligned in optical axis Extremely sharp focus due to computer simulated optics Computer controlled laser power Computer controlled laser focus (z-position of the beam) Safety devices and eye protection filters	
Control Unit	System control unit with complete set of wires.	
Computer controlled xy- stage	Computer controlled and motorised xy-stage 120x100 mm travelling path. 0,025 µm step width for high precision cutting. 1µm repositioning accuracy	
CapLift	Software controlled positioning, lifting and lowering of adhesive cap, possibility to adjust contact pressure according to specific application needs.	
Camera	CellCamera DXA285cF for outstanding image quality and colour fidelity IEEE 1394a (FireWireTM progressive scan CCD camera) Ultra high sensivity Exview CCD technology and dynamic range Advanced passive cooling concept for exposure times up to 30	

CellCut Plus - Microdissection System for

CellCut Plus - Microdissection System for 1X2 microscopes The CellCut Plus system offers precise and reliable laser microdissection / micromanipulation for applications in molecular biology, cytogenetics, molecular medicine, pathology, and forensic medicine. The system is based on the unique and patented contamination free membrane and CapLift technology. Single or multiple samples can be collected with adjustable contact pressure using the new plug & play automated CapLift. The progressive scan CCD CellCamera delivers outstanding image quality which -in conjunction with the intuitive UVCut Plus software- facilitates the precise drawing of cutting paths into the live image. Functional integration of the inverted IX81 microscope allows full motorisation of the system.

	sec 1392 x 1040 pixels High Quality 12 Bit slow scan mode for lowest readout noise Up to 15 full frames per second Ultra compact dimensions Automatic shutter, automatic/manual white balance	
UV Cut Software (system control software)	Special program for drawing the cutting path into the computer live image. Free-hand drawing or predefined figures Automatic cutting of marked areas or cells Multigroup marking and cutting of unlimited number of different groups Multiple cutting of the same area Automatic Cap Inspection Mode and automatic CapLift over full slide Store and recall of positions Documentation Scanned-in overview of slide for easy navigation Modular Software, compatible with Optical Tweezers and Cell Pick Unique PTP (Predefined Target Positioning) functions	
System PC and monitor	System computer and monitor Interactive control of motorised xy stage with real time video image on computer screen. Complete with computer Pentium IV 650, 3.4 GHz, 1 GB RAM, MS Windows XP Professional, HDD 80 GB, video overlay, 19" LCD flat screen, DVD burner, RW	
CellCut Documentation	Complete instruction manual in English as hardcopy and as .doc file on system computer $% \left({\left[{n_{\rm s}} \right]_{\rm system}} \right)$	
Consumables	50 membrane slides, 50 caps with adhesive material	
		E0439103

Observation Tubes, Intermediate Tubes and Eyepieces

	Description	Article code
	Observation Tubes	
U-BI90CT-1-2	Binocular (Siedentopf) tube with integrated centring telescope and shutter, 45° inclination and pupillary distance adjustment from 50 to 76 mm. Adjustable diopter range (± 5 diopter) on right sleeve. To be used with WHN10x/22, WHN10x-H/22 eye- pieces.	N1510300
U-TBI90	Binocular ergo tube with 35° to 85° tilting angle, diopter adjustment on one eyepiece, eyepoint height adjustable from 406mm to 471mm	035774
	Intermediate Tubes	
U-TV0.63XC	Camera adapter with C-mount, 0.63x magnification factor.	N2179000
	Eyepieces	
WHN10X/22	Widefield eye-piece with fieldnumber 22.	N1508000
WHN10X-H/22	Focusable widefield eye-piece with fieldnumber 22.	N1508100

Illumination Pillar, Lamphouse and Power Supply



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	Illumination Pillar (100W)	
IX2-ILL100	Tiltable illumination pillar for centerable 100 W Halogen lamp housing, 4 filter holders, F.S. and condenser support.	35762
	Lamphouse and Power Supply (100W)	
U-LH100L-3-5	100 W Halogen lamphouse with collector lens and long connecting cable.	N2212100
U-RMT	Cable for connecting the 100 W Halogen lamp house U-LH100-3 -5 or IX-HLSH100 with TH-4 transformer or the BX- or IX2-UCB control-boxes for PC control of the lamp. Length 1.7 m	37998
AHS-LAMP 12V/100W	Precentered 100 W halogen lamp	35359
TH-4	Transformer for 100 W Halogen lamp, 220-240 V.	35495

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	Description	Article code
IX2-MLWCD	Universal ultra long working diatice condenser for brightfield, Olympus relief contrast, phase contrast and DIC. With numerica aperture of 0.5, working distance of 45 mm. Equipped with aperture stop and polarisdor relief contrast. Four-position turret includes the relief contrast elements RC1, RC2 and RC3.	l 35771

Range of Objectives

\Box	Description	Article Code
	Note: Only the following objectives are offered for cutting. The full range of objectives can be found undobjectives & Accessories For the optimal choice of objectives according to your application pleas@ontact Us	
UPLFLN4x/0,13	Universal Plan Fluorite objectewith 4x magnification. With working distance of 17 mm, and numerical aperture of 0.1 Suitable for any cover slip thickness.	3N147830
UPLFLN10x/0,3	Universal Plan Fluorite objective with 10x magnification. With working distance of 10 mm und numerical aperture o 0.3. Suitable for any cover slip thickness.	fN147840
UPLFLN10XPH/0,3	Universal Plan Fluorite objective with 10x magnification. With working distance of 10 mm and numerical aperture o 0.3. Suitable for any cover slip thickness. For phase contra observations (PH1).	f N147920 Ist
LUCPLFLN20X/0.45	Long working distance Universal CPIan Fluorite objective with 20x magnification. With variable working distance fro 6.6 to 7.8 mm, numerical aperture of 0.45 and variable cover correction from 0 to 2 mm via correction collar.	N149270
LUCPLFLN20XPH/0.45	Long working distance Universal Cplan Fluorite objective with 20x magnification. With variable working distance fro 6.6 to 7.8 mm, numerical aperture of 0.45 and variable cover correction from 0 to 2 mm via correction collar. For phase-contrast observations (PH1).	m N149290
LUCPLFLN40X/0,6	Long working distance Universal CPIan Fluorite objective with $40x$ magnification. With variable working distance fro 2.7 to 4 mm, numerical aperture of 0.6 and variable cover correction from 0 to 2 mm via focus free correction collar.	N149280
LUCPLFLN40XPH/0.6	Long working distance Universal Cplan Fluorite objective with 40x magnification. With variable working distance fro 3 to 4.2 mm, numerical aperture of 0.6 and variable cover correction from 0 to 2 mm via focus free correction collar. For phase-contrast observations (PH2).	
LUCPLFLN60X/0,7	Long working distance Universal CPIan Fluorite objective with 60x magnification. With variable working distance fro 1.5 to 2.2 mm, numerical aperture of 0.7 and variable cov correction from 0.1 to 1.3 mm via semi focus free correction collar.	e№150710
LUCPLFLN60XPH/0.7	Long working distance Universal CPIan Fluorite objective with 60x magnification. With variable working distance fro 1.5 to 2.2 mm, numerical aperture of 0.7 and variable cov correction from 0.1 to 1.3 mm via semi focus free correction collar. For phase-contrast observations (PH2).	eNd150720
UPLFLN100xO2/1.3	Universal Plan Fluorite oil immersion objective with 100x magnification. With working distance of 0.2 mm, numerica aperture of 1.3 and cover correction of 0.17 mm.	IN156120

Fluorescence Equipment (optional)

	Description	Article Code
	Fluorescence Adaption	
MMI-FLUO-AD	Integration of Olympus fluorescence items plus SW functions	E0439239
	Lamphouse, Power Supply and Burner	
U-LH100HG	Lamphouse incl. lamp socket and aspherical collector lens for 100W mercury lamp.	037940
U-RFL-T2-200	Power supply for 100W mercury lamp, 220-240 V/50-60Hz, 3 fuses for replacement.	037947
USH-103OL	USHIO 100W mercury burner	N1217800
UYCP	Power cord	037940
	Fluorescence Condenser	
IX2-RFAL	L-shaped fluorescence condenser, with centerable aperture stop, field stop and filter slider	35764
	Fluorescence Cubes	
U-MNU2	Fluorescence filter cube, narrow-band UV excitation: exciter filter BP360-370, beam splitter DM400, barrier filter BA420	37056
U-MWIBA3	Fluorescence filter cube with Ion-coated filters. Wide-band Blueexcitation with bandpass emitter: exciter filter BP460-495, dichroic beam splitter DM505, barrier BA510-550	N1511000
U-MWG2	Fluorescence filter cube, wide-band Green excitation: exciter filter BP510-550, dichroic beam splitter DM570, barrier filter BA590	37063
IX2-RFAC	Fluorescence cube cassette, six-position turret and manual shutter.	35765

Motorisation (with IX81)

Name	Description	Article Code
IX2-UCB-2	Control box for the motorised units, equipped with power source for U-LH100L-3, including IX2-BSW basis software	N1169600
U-ZPCB	Z-drive control board for the UCB control units, necessary for operating the motorised focusing unit for the motorised frames of the BX2 and IX2 series	37996
UYCP	Power Cord	35425
BX-UCBRS232	Special RS232 cable (with socket/socket) for connecting the control box with the PC.	39638
	Motorised Fluorescence Components	
IX2-RFAL	L-shaped fluorescence condenser, with centerable aperture stop, field stop and filter slider	35764
IX2-RFACA	Motorised six-position fluorescence cube cassette with manual shutter	35766
IX2-SHA	Motorised shutter for reflected and transmitted light	35801

