

Customer Catalogue

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Microfluidic Pumps

ExiGo™ Pump

ExiGo pump is a microfluidic syringe pump controlled by an iPad mini. Suitable for numerous microfluidic applications, precise multichannel mixing, electrophysiology, single cell analysis, analytical biochemistry and RNA/DNA analysis. Key features of the ExiGo are:

- Precise flow control with active feedback via plug-and-play flow sensor (optional add-on).
- Flow rate: 10 nL/min–2 0mL/min ±0.5%.
- Standard syringes: 100 µL–5 mL.
- Wash mode or programmable perfusion mode (constant, ramp, step, sine) with reversible flow direction.
- Rapid flow change (ms range).
- Excellent long-term flow stability.
- iPad mini or PC (LabVIEW, Matlab, Python etc.) control which can control/program up to 4 pump modules independently.
- Wi-Fi communication.
- Use standard tubing for connection to any microfluidic biochip.



ExiGo pumps controlled by iPad mini

NOTE: flow sensors are optional and may be purchased separately.

IMPORTANT: Please note that hot-plugging ExiGo pumps is extremely damaging to the equipment. This means any installation or removal of pumps to a set-up must be done when the system is off. Removing the pumps while the system is running can cause electrostatic discharge which can severely damage the electrical components of the pump including the PCB and will likely result in your pump requiring repair at Cellix. When docking or un-docking two pumps together the system must be off, and the residual electrostatic discharge cleared by pressing the power button in one short movement. Only then can pumps be docked. If you are buying a two or more ExiGos, you must purchase a clamp base made of aluminium. This holds the pumps in place and reduces risk of damage to electrical components by ensuring they do not separate.

ExiGo TLB.Ivlib:MAIN - Template Application.vi

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SmartFlo App on iPad mini for ExiGo/UniGo pump showing sample volume to be dispensed from ExiGo pump



SmartFlo software for PC — LabVIEW based



Manifold for refilling syringe or switching reservoirs: optional accessory for ExiGo pump

Part number			Optional (to be discussed)			
Family		Controlled via	F	low sensor		Manifold
IPad mini with IPAD SmartFlo app included PC for PC included (LabVIEW based)	FS1.5	Max flow rate: ±1.5 μL/min (±1,500 nL/min)				
	SmartFlo software for PC included (LabVIEW based)	FS7.0	Max flow rate: ±7.0 μL/min (±7,000 nL/min)		Includes manifold for	
EXIGO	IGO SLA For customers who have already purchased an ExiGo or UniGo pump or when ordering a kit (more than 1 pump) Max flo ±80.0 µ (±80,00 nL/min) ±1 mL/r	Max flow rate: ±80.0 µL/min (±80,000 nL/min)		or switching reservoirs		
		when ordering a kit (more than 1 pump)	FS1000	Max flow rate: ±1 mL/min		
		(NS	No flow sensor	NF	No manifold

Ordering example: product codes

	Op	tion	al
		\sim	
rolled via -	Flow sensor	-	Manifold
PAD -	FS80.0	- 1	MF
PC -	NS	-	MF
PAD -	NS	-	MF
r	rolled via - PAD - PC - PAD -	Oprolled via-PAD-PC-PAD-NSPAD-NS	Optionrolled via-PAD-PC-NS-PAD-NS-

Kit ordering example

			Optional				
Family -	Controlled via	-	Flow sensor	-	Manifold		
EXIGO -	IPAD	-	FS80.0	-	MF		
EXIGO -	SLA	-	NS	-	MF		
EXIGO -	SLA	-	FS7.0	-	NF		
EXIGO -	SLA	-	NS	-	NF		

Example product ordering information

Product: what's in the box	Product	List	Harmonisation	CPV codes
	coue	2018	coues	
1 x ExiGo pump; 1 x iPad mini with	EXIGO-	POA	8413 19 00 90	42122500-5
SmartFlo app; 1 x flow sensor (7.0	IPAD-			
μl/min); 1 x manifold; 1 x tubing	FS7.0-MF			
kit; power supply and cables				
1 x ExiGo pump; 1 x LabVIEW for	EXIGO-PC-	POA	8413 19 00 90	42122500-5
PC; 1 x flow sensor (7.0 μl/min); 1 x	FS7.0-MF			
manifold; 1 x tubing kit; power				
supply and cables				
1 x ExiGo pump; 1 x iPad mini with	EXIGO-	POA	8413 19 00 90	42122500-5
SmartFlo app; 1 x flow sensor (7.0	IPAD-			
μl/min); 1 x tubing kit; power	FS7.0-NF			
supply and cables				

1 x ExiGo pump; 1 x LabVIEW for	EXIGO-PC-	POA	8413 19 00 90	42122500-5
PC; 1 x flow sensor (7.0 μl/min); 1 x	FS7.0-NF			
tubing kit; power supply and cables				
1 x ExiGo pump; 1 x iPad mini with	EXIGO-	РОА	8413 19 00 90	42122500-5
SmartFlo app; 1 x manifold; 1 x	IPAD-NS-			
tubing kit; power supply and cables	MF			
1 x ExiGo pump; 1 x LabVIEW for	EXIGO-PC-	POA	8413 19 00 90	42122500-5
PC; 1 x manifold; 1 x tubing kit;	NS-MF			
power supply and cables				
1 x ExiGo pump; 1 x iPad mini with	EXIGO-	РОА	8413 19 00 90	42122500-5
SmartFlo app; 1 x tubing kit; power	IPAD-NS-			
supply and cables	NF			
1 x ExiGo pump; 1 x LabVIEW for	EXIGO-PC-	РОА	8413 19 00 90	42122500-5
PC; 1 x tubing kit; power supply	NS-NF			
and cables				
1 x ExiGo pump; 1 x manifold; 1 x	EXIGO-	POA	8413 19 00 90	42122500-5
tubing kit; power supply and cables	SLA-NS-			
	MF			
1 x ExiGo pump; 1 x tubing kit;	EXIGO-	POA	8413 19 00 90	42122500-5
power supply and cables	SLA-NS-NF			

ExiGo optional accessories: ordering information

Product: what's in the box	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
1 x flow sensor for flow rates of	FS1.5	POA	8413 19 00 90	38421000-2
±1.5 μL/min (±1,500 nL/min)				
1 x flow sensor for flow rates of	FS7.0	POA	8413 19 00 90	38421000-2
±7.0 μL/min (±7,000 nL/min)				
1 x flow sensor for flow rates of	FS80.0	POA	8413 19 00 90	38421000-2
±80.0 μL/min (±80,000 nL/min)				
1 x flow sensor for flow rates of	FS1000	POA	8413 19 00 90	38421000-2
±1 mL/min				
Manifold	MF	POA	8413 19 00 90	42122500-5

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ExiGo[™] Manifold

The ExiGo manifold is a specialised microfluidic channel selector designed to work with an ExiGo pump. The manifold allows the ExiGo pump to direct fluid to one of three microfluidic channels* at a time. Accurate flow switching and low dead volume provide exceptional performance. The ExiGo manifold can be programmed to automatically switch between fluidic channels using the SmartFlo PC software. The ExiGo Manifold is an extremely useful tool for applications which require:

- Automatic refilling of the syringe
- Asynchronous injection of a reagent in multiple channels
- Continuous perfusion over long periods of time**



ExiGo manifold



* Each channel can be used as input or output.

**Additional equipment may be required.

Product: what's in the box	Product code	List price	Harmonisation	CPV codes
		2018	codes	
Manifold	MF	POA	8413 19 00 90	42122500-5

ExiGo[™] Supported Syringes

ExiGo application executed on the iPad mini communicates with up to 4 ExiGo microfluidic pumps racked together allowing simultaneous control and independent programming of each pump's flow profile. The following is a list of supported syringes compatible with the ExiGo microfluidic pump.

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Syringe selection for ExiGo pump controlled via SmartFlo app on Apple iPad mini

Hamilton syringes		Harmonisation codes	CPV codes
Part number	Description		
700 Series			
80601	100 μL, Model 710 LT SYR	9033 00 00 00	33141310-6
80701	250 μL <i>,</i> Model 725 LT SYR	9033 00 00 00	33141310-6
80801	500 μL <i>,</i> Model 750 LT SYR	9033 00 00 00	33141310-6
1000 Series			
81301	1 mL, Model 1001 LT SYR	9033 00 00 00	33141310-6
BD Plastipak s	yringes	Harmonisation codes	CPV codes
300013	1 mL Syringe. Luer tip	9033 00 00 00	33141310-6
300185	2.5 mL Syringe. Luer tip	9033 00 00 00	33141310-6
302187	5 mL Syringe. Luer tip	9033 00 00 00	33141310-6

UniGo[™] Pump

UniGo microfluidic pump is a precision, microfluidic, single-channel pressure pump for a variety of microfluidic applications, where accurate and stable flow rate delivery is required. The pressure pump component is based on controlled air injection. The UniGo pump requires a plug-and-play flow sensor for active feedback and increased flow control. SmartFlo application executed on the iPad mini or LabVIEW based interface communicates with up to 4 UniGo microfluidic pumps racked together allowing simultaneous control and independent programming of each pump's flow profile.

Uniquely, the UniGo pressure pump may be docked together with the ExiGo microfluidic syringe pump combining the best features of both UniGo and ExiGo in one microfluidic setup. Key features of the UniGo are:

- Precise flow control with active feedback via plug-and-play flow sensor (compulsory add-on).
- Flow rate: 1 µL/min–1 mL/min; unidirectional (push).
- Wash mode or programmable perfusion mode (constant, ramp, step, sine) with reversible flow direction.
- iPad mini or PC (LabVIEW, Matlab, Python etc.) control which can control/program up to 4 pump modules independently.
- Use standard tubing for connection to any microfluidic biochip.
- Internal and/or external compressor options.

NOTE: flow sensors must be purchased with UniGo pumps.



UniGo microfluidic pump: up to 4 pumps independently via Apple iPad mini or LabVIEW



UniGo and ExiGo pumps docked together: up to 4 pumps (interchangeable) may be controlled independently via Apple iPad mini or LabVIEW

IMPORTANT: Please note that hot-plugging UniGo pumps is extremely damaging to the equipment. This means any installation or removal of pumps to a set-up must be done when the system is off. Removing the pumps while the system is running can cause electrostatic discharge which can severely damage the electrical components of the pump including the PCB and will likely result in your pump requiring repair at Cellix. When docking or un-docking two pumps together the system must be off, and the residual electrostatic discharge cleared by pressing the power button in one short movement. Only then can pumps be docked. If you are buying a two or more UniGo pumps, you must purchase a clamp base made of aluminium. This holds the pumps in place and reduces risk of damage to electrical components by ensuring they do not separate.



SmartFlo App on iPad mini for ExiGo/UniGo pump showing sample volume to be dispensed from ExiGo pump



SmartFlo software for PC — LabVIEW based

	Part number							
Family		Compressor option	option Controlled via		Flo	ow sensor		
			IPAD	iPad mini with SmartFlo app included	FS1.5	Max flow rate: ±1.5 μL/min (±1,500 nL/min)		
	EC	Connection to an external pressure source only	PC	SmartFlo software for PC included (LabVIEW based)	FS7.0	Max flow rate: ±7.0 μL/min (±7,000 nL/min)		
UNICO	NC	No compressor or external pressure source included. Customer is	SLA	For customers who have already purchased an ExiGo or UniGo	FS80.0	Max flow rate: ±80.0 μL/min (±80,000 nL/min)		
responsible for SLA compressor/pressure source to be connected.	pump or when ordering a kit (more than 1 pump)	FS1000	Max flow rate: ±1 mL/min					

Ordering example: product codes

Family -	Compressor option	-	Controlled via	-	Flow sensor
UNIGO -	EC	-	IPAD	-	FS80.0

Product: what's in the box	Product code	List price 2018	Harmonisation codes	CPV codes
1 x UniGo pump; 1 x external	UNIGO-	POA	8413 19 00 90	42122500-5
compressor; 1 x iPad mini with	EC-IPAD-			
SmartFlo app; 1 x flow sensor (80.0	FS80.0			
μl/min); 1 x tubing kit; power				
supply and cables				
1 x UniGo pump; 1 x external	UNIGO-	POA	8413 19 00 90	42122500-5
compressor; 1 x LabVIEW for PC; 1	EC-PC-			
	FS80.0			

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x flow sensor (80.0 μl/min); 1 x tubing kit; power supply and cables				
1 x UniGo pump; 1 x external	UNIGO- EC-SLA-	POA	8413 19 00 90	42122500-5
μ /min); 1 x tubing kit; power	FS80.0			
supply and cables				
1 x UniGo pump; no compressor	UNIGO-	POA	8413 19 00 90	42122500-5
included; 1 x iPad mini with	NC-IPAD-			
SmartFlo app; 1 x flow sensor (80.0	FS80.0			
μl/min); 1 x tubing kit; power				
supply and cables				
1 x UniGo pump; no compressor	UNIGO-	POA	8413 19 00 90	42122500-5
included; 1 x LabVIEW for PC; 1 x	NC-PC-			
flow sensor (80.0 μl/min); 1 x	FS80.0			
tubing kit; power supply and cables				
1 x UniGo pump; no compressor	UNIGO-	POA	8413 19 00 90	42122500-5
included; 1 x flow sensor (80.0	NC-SLA-			
μl/min); 1 x tubing kit; power	FS80.0			
supply and cables				

UniGo optional accessories: ordering information

Product: what's in the box	Product code	List price 2018	Harmonisation codes	CPV codes
1 x flow sensor for flow rates of	FS1.5	POA	8413 19 00 90	38421000-2
±1.5 μL/min (±1,500 nL/min)				
1 x flow sensor for flow rates of	FS7.0	POA	8413 19 00 90	38421000-2
±7.0 μL/min (±7,000 nL/min)				
1 x flow sensor for flow rates of	FS80.0	POA	8413 19 00 90	38421000-2
±80.0 μL/min (±80,000 nL/min)				
1 x flow sensor for flow rates of	FS1000	POA	8413 19 00 90	38421000-2
±1 mL/min				
External compressor for UniGo or	EC	POA	8413 19 00 90	42123000-7
4U pumps				

4U[™] Pump

4U is a 4-channel precision, microfluidic, pressure pump for a variety of microfluidic applications, where accurate and stable flow rate delivery is required. The pressure pump component is based on controlled air injection. SmartFlo application executed on the iPad mini or LabVIEW based interface communicates with the 4 separate channels of the 4U pump allowing simultaneous control and independent programming of each pump's flow profile.

Key features of the 4U are:

- Precise flow control with active feedback via plug-and-play flow sensor (compulsory add-on).
- Flow rate: 1 µL/min–1 mL/min; unidirectional (push).
- Wash mode or programmable perfusion mode (constant, ramp, step, sine) with reversible flow direction.
- iPad mini or PC (LabVIEW, Matlab, Python etc.) control.
- Use standard tubing for connection to any microfluidic biochip.
- Internal and/or external compressor options.

NOTE: flow sensors must be purchased with the 4U pump.

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4U microfluidic pump: up to 4 pumps controlled independently via Apple iPad mini or LabVIEW



SmartFlo software for PC — LabVIEW based

Part number									
Family	Con	pressor option	Cont	rolled via	Flow sensor				
					FS 1	FS 2	FS 3	FS 4	
	FC	Connection to an external	iPad mini with IPAD SmartFlo	FS1.5	FS1.5	FS1.5	FS1.5	Max flow rate: ±1.5 μL/min (±1,500 nL/min)	
	EC	pressure source only	IFAD	app included	FS7.0	FS7.0	FS7.0	FS7.0	Max flow rate: ±7.0 μL/min (±7,000 nL/min)
4U	NC	No compressor or external pressure source included. Customer is	РС	SmartFlo software for PC included	FS80.0	FS80.0	FS80.0	FS80.0	Max flow rate: ±80.0 μL/min (±80,000 nL/min)
	responsible for (LabVIE compressor/pr W essure source based) to be connected.	FS1000	FS1000	FS1000	FS1000	Max flow rate: ±1 mL/min			

Ordering example: product codes



Product: what's in the box	Product code	List price 2018	Harmonisation codes	CPV codes
1 x 4U pump; 1 x external compressor; 1 x iPad mini with	4U-EC- IPAD-	ΡΟΑ	8413 19 00 90	42122500-5
μ /min); 1 x flow sensor (7.0 μ /min); 1 x flow sensor (1.5 μ /min);	FS7.0- FS1.5- FS80.0			
1 x 4U pump; 1 x external compressor; 1 x LabVIEW for PC; 2 x flow sensor (80.0 μl/min); 1 x flow sensor (7.0 μl/min); 1 x flow sensor (1.5 μl/min)	4U-EC-PC- FS80- FS7.0- FS1.5- FS80.0	ΡΟΑ	8413 19 00 90	42122500-5
1 x 4U pump; 1 x no compressor; 2 x flow sensor (80.0 μl/min); 1 x flow sensor (7.0 μl/min); 1 x flow sensor (1.5 μl/min)	4U-NC- IPAD- FS80- FS7.0- FS1.5- FS80.0	ΡΟΑ	8413 19 00 90	42122500-5
1 x 4U pump; 1 x no compressor; 1 x LabVIEW for PC; 2 x flow sensor (80.0 μl/min); 1 x flow sensor (7.0 μl/min); 1 x flow sensor (1.5 μl/min)	4U-NC-PC- FS80- FS7.0- FS1.5- FS80.0	ΡΟΑ	8413 19 00 90	42122500-5

4U optional accessories: ordering information

Product: what's in the box	Product code	List price 2018	Harmonisation codes	CPV codes
1 x flow sensor for flow rates of ±1.5 μL/min (±1,500 nL/min)	FS1.5	ΡΟΑ	8413 19 00 90	38421000-2
1 x flow sensor for flow rates of ±7.0 μL/min (±7,000 nL/min)	FS7.0	ΡΟΑ	8413 19 00 90	38421000-2

1 x flow sensor for flow rates of ±80.0 μL/min (±80,000 nL/min)	FS80.0	POA	8413 19 00 90	38421000-2
1 x flow sensor for flow rates of ±1 mL/min	FS1000	POA	8413 19 00 90	38421000-2
External compressor for UniGo or 4U pumps	EC	POA	8413 19 00 90	42123000-7

Flow Sensor Options

Flow sensors are compatible with the ExiGo, UniGo and 4U microfluidic pumps. Flow sensors for Cellix's microfluidic pumps enable active feedback and PID control. Ideal for microfluidic applications, where accurate and stable flow rate delivery is required resulting in superior performance.

Cellix's flow sensors are plug-and-play connections to the microfluidic pumps. The flow sensor should be chosen to suit the intended flow rates of the application:

- ±1.5 μL/min (±1,500 nL/min)
- ±7.0 μL/min (±7,000 nL/min)
- ±80.0 μL/min (±80,000 nL/min)
- ±1 mL/min



Maximum pressure of the flow sensor is 30 psi-2 bars.

Product: what's in the box	Product	List price	Harmonisation	CPV codes
	couc	2010	coucs	
1 x flow sensor for flow rates of	FS1.5	POA	8413 19 00 90	38421000-2
±1.5 μL/min (±1,500 nL/min)				
1 x flow sensor for flow rates of	FS7.0	POA	8413 19 00 90	38421000-2
±7.0 μL/min (±7,000 nL/min)				
1 x flow sensor for flow rates of	FS80.0	POA	8413 19 00 90	38421000-2
±80.0 μL/min (±80,000 nL/min)				
1 x flow sensor for flow rates of	FS1000	POA	8413 19 00 90	38421000-2
±1 mL/min				

Kima[™] Pump

Kima pump is a microfluidic recirculating pump controlled by an iPod Touch or PC. Suitable for continuous microbe and cell culture under shear flow mimicking physiological flow in the human vasculature. Applications include biofilm studies, cell culture in biochips with adherent cells (HUVECs), stem cells, HepG2 cells.

Key features of the Kima are:

- Fits inside standard CO₂ incubator maintaining temperature, humidity etc.
- Recirculating long term perfusion pump.
- Wash mode or pump mode.
- Dead volume: <300 µL.
- iPod Touch or PC control option which can control up to 4 pump modules independently.
- Wi-Fi communication.
- Includes tubing kit for Vena8 biochips or alternative tubing kits for other biochips available.



Kima pump controlled by iPod Touch

NOTE: the Kima pump is not suitable for shear stressed based assays because the pump delivers liquid in pulses (not continuous flow).



iPod Touch app for Kima pump showing perfusion setting

The Kima Pump (Code=KIMA-PRO-1.0) contains:

- 1 x Kima Pump
- 1 x iPod Touch with iKima App
- 1 x iPod Dock
- 1 x tubing kit
- 1 x 100mL Bottle with GL45 cap
- 1 x Power supply & cables
- 1 x Velcro strips

Product: what's in the box	Product code	List price	Harmonisation codes	CPV codes
		2018		
1 x Kima pump; 1 x iPod Touch	KIMA-	ΡΟΑ	8413 19 00 90	42122500-5
with iKima app; 1 x iPod	PRO-IPOD			
(controller); 1 x tubing kit; 1 x 100				
mL bottle with GL45 cap; power				
supply and cables; Velcro strips to				
secure iPod dock to CO_2 incubator				
1 x Kima pump; 1 x PC control	KIMA-	POA	8413 19 00 90	42122500-5
software; 1 x iPod (controller); 1 x	PRO-PC			
tubing kit; 1 x 100 mL bottle with				
GL45 cap; power supply and				
cables; Velcro strips to secure iPod				
dock to CO_2 incubator				
1 x Kima pump; 1 x tubing kit; 1 x	KIMA	POA	8413 19 00 90	42122500-5
100 mL bottle with GL45 cap;				
power supply and cables				

Mirus Evo Pro[™] — PC Controlled via VenaFlux Assay Software

Mirus Evo Pro is a microfluidic syringe pump PC controlled via VenaFlux assay software. Suitable for microfluidic applications, single cell analysis and cell analysis under shear flow in biochips mimicking physiological flow in the human vasculature. Compatible with cell suspension samples and whole blood samples. Key features of the Mirus Evo Pro include:

- Includes MultiFlow8 for precision flow splitting with equal flow rate in each channel.
- MultiFlow8 contains 8 valves which can be switched on/off independently.
- Higher throughput enabling 8 assays in parallel.
- Patented flow damper to decrease syringe pump pulses.
- Flow rate: 100 nL/min–10 mL/min ±1% (syringes available: 50 μL–5 mL).
- Dead volume: ~600 μL.
- Flow direction reversible.
- PC controlled via VenaFlux assay software.



Mirus Evo nanopump with MultiFlow8: controlled by PC software, VenaFlux assay (included)



VenaFlux[™] assay software 2.3.a



Mirus Evo and MultiFlow8

Mirus Evo

Product: what's in the box	Product code	List price 2018	Harmonisation codes	CPV codes
1 x Mirus Evo syringe pump; 1 x MultiFlow8; 1 x VenaFlux assay software; 1 x tubing kit; power supply and cables	MIRUS-EVO- PRO	ΡΟΑ	8413 19 00 90	42122500-5
1 x Mirus Evo syringe pump; 1 x VenaFlux assay software; 1 x tubing kit; power supply and cables	MIRUS-EVO- PUMP	ΡΟΑ	8413 19 00 90	42122500-5
1 x MultiFlow8 for the Mirus Evo nanopump only	MIRUS- MULTIFLOW8	POA	8413 19 00 90	42122500-5

Unit 1, Longmile Business P

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Biochips

Vena8 Fluoro+™ Biochips

Each biochip contains 8 capillaries in parallel which can be coated with different adhesion molecules for cell receptor-ligand (i.e. cellmatrix interactions) studies under shear flow. Each 10 pack contains 80 assays. Each 5 pack contains 40 assays. These biochips are compatible with confocal microscopy.



Product Product List price Harmonisation **CPV codes** 2018 code codes Vena8 Fluoro+ biochip (Pack V8CF-400-POA 9033 00 00 00 38425000-0 10) 100-02P10 Vena8 Fluoro+ biochip (Pack V8CF-400-POA 9033 00 00 00 38425000-0 5) 100-02P5 Vena8 Fluoro+ biochip (Pack V8CF-400-POA 9033 00 00 00 38425000-0 100-02P10

Compatible with ExiGo pump, UniGo pump, 4U pump, Mirus Evo nanopump, Kima pump.

Vena8 Endothelial+[™] Biochips

10)

Each biochip contains 8 capillaries in parallel which can be seeded with endothelial cells for culture of 8 monolayers in parallel and subsequent study of cell-cell interaction studies under shear flow. Each 10 pack contains 80 assays. Each 5 pack contains 40 assays.



Compatible with ExiGo pump, UniGo pump, 4U pump, Mirus Evo nanopump, Kima pump.

Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
Vena8 Endothelial+ biochip	V8EP-800-	POA	9033 00 00 00	38425000-0
(Pack 10)	120-02P10			

Vena8 Endothelial + biochip	V8EP-800-	РОА	9033 00 00 00	38425000-0
(Pack 5)	120-02P5			
Vena8 Endothelial + biochip	V8EP-800-	POA	9033 00 00 00	38425000-0
(Pack 10)	120-02P10			

VenaT4[™] Biochips

Each biochip contains 4 capillaries in parallel with a membrane of pore size 2–10 μ m diameter separating them from a microwell underneath. Chemoattractants can be placed inside the well for subsequent study of cell migration through the membrane under shear flow. Each pack contains 10 biochips = 40 assays. Pore size choices: 2 μ m; 5 μ m; 8 μ m or 10 μ m.



Compatible with ExiGo pump, UniGo pump, 4U pump, Mirus Evo nanopump.

Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
VenaT4 biochip (Pack 10)	VT4-800-	POA	9033 00 00 00	38425000-0
	100-2-1P10			
VenaT4 biochip (Pack 10)	VT4-800-	POA	9033 00 00 00	38425000-0
	100-2-1P10			

Vena8 Glass Coverslip Biochips; Adhered/Non-adhered; Treated/Non-treated

Each biochip contains 8 capillaries in parallel which can be coated with a protein or seeded with cells or microbes and subsequent study of drug interaction, imaging or molecular biology studies under shear flow. Within this range of biochips; the bottom substrate is a glass coverslip which is supplied separate or supplied adhered to the chip.



The glass coverslip may be non-treated or treated with chelated Cu2+ ion tethered to the high-density PEG coating. The surface of the microcapillaries is easily coated via pipetting the protein into the capillary which then binds via the poly-histidine tag.

Each 10 pack contains 80 assays. These biochips are compatible with confocal microscopy. Compatible with ExiGo pump, UniGo pump, 4U pump, Mirus Evo nanopump for low shear stresses of 0.1–2 dyne/cm² (water-based solution) and 0.45–9 dyne/cm² (whole blood) and for high shear stresses of 20–40 dyne/cm² (water-based solution) and 90–180 dyne/cm² (whole blood). Compatible with Kima pump for long term cell culture. Kima pump is not compatible with whole blood.

Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
Vena8 with Glass Coverslips	V8GCS-A-T-	POA	9033 00 00 00	38425000-0
adhered, treated with Cu2+	Cu2+Htag-			
histidine tag; low flow rates	1600-160-			
(Pack 10)	P10			
Vena8 with Glass Coverslips	V8GCS-A-T-	POA	9033 00 00 00	38425000-0
adhered, treated with Cu2+	Cu2+Htag-			
histidine tag; high flow rates	800-80-P10			
(Pack 10)				
Vena8 with Glass Coverslips	V8GCS-A-NT-	POA	9033 00 00 00	38425000-0
adhered, non-treated; low	1600-160-			
flow rates (Pack 10)	P10			
Vena8 with Glass Coverslips	V8GCS-A-NT-	POA	9033 00 00 00	38425000-0
adhered, non-treated; high	800-80-P10			
flow rates (Pack 10)				
Vena8 with Glass Coverslips	V8GCS-NA-	POA	9033 00 00 00	38425000-0
not adhered, non-treated; low	NT-1600-			
flow rates (Pack 10)	160-P10			
Vena8 with Glass Coverslips	V8GCS-NA-	POA	9033 00 00 00	38425000-0
not adhered, non-treated;	NT-800-80-			
high flow rates (Pack 10)	P10			
Vena8 with adhesive bottom	V8-	POA	9033 00 00 00	38425000-0
layer; low flow rates (Pack 10)	Adhesive-			
	1600-160-			
	P10			

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Vena8 with adhesive bottom	V8-	POA	9033 00 00 00	38425000-0
layer; high flow rates (Pack 10)	Adhesive-			
	800-80-P10			

DropChip: Droplet Generation Chips

DropChips contain three 'droplet generators' and one 'splitter' (Y-junction channel) for splitting the continuous phase (oil or water). The channel surface properties are optimized according to the type of application:

- Hydrophobic channels for water-in-oil (W/O) droplets
- Hydrophilic channels for oil-in-water (O/W) and gas-in-water droplets.

Frequency and size of the droplets can vary depending on several factors: channel dimensions; flow rates; oil type; surfactant type and surfactant concentration.

Fluidic ports (not displayed in the drawing) allow the user to plug directly a 25 Gauge needle into the inlet without using any additional glue or connector. Suitable tubing sets can be purchased directly from Cellix Ltd.

Recommended tubing sets:

- Biochip-Connect Single Inlet Cables Pk 10 (Product Code: BIOCHIP-CONNECT-B1ICPACK10)
- Biochip-Connect Single Outlet Cables Pk 10 (Product Code: BIOCHIP-CONNECT-B1OCPACK10)

DropChips are supplied in packs of 2, facilitating 6 droplet generators and 2 splitters per pack. Compatible with ExiGo pumps.





Product	Drople	t size	Product code	List	price	2018	Harmonisation codes	CPV codes
	Diameter (µm)	Volume (pL)		Pk 2	Pk 5	Pk 10		
DropChip; hydrophilic	<30	<14	DC-30- 30- 01P2	POA	POA	ΡΟΑ	9033 00 00 00	3842500 0-0
DropChip; hydrophilic	<40	<33	DC-40- 40- 01P2	POA	POA	ΡΟΑ	9033 00 00 00	3842500 0-0
DropChip; hydrophilic	<50	<65	DC-50- 50- 01P2	POA	POA	ΡΟΑ	9033 00 00 00	3842500 0-0
DropChip; hydrophilic	<60	<113	DC-60- 60- 01P2	POA	POA	ΡΟΑ	9033 00 00 00	3842500 0-0
DropChip; hydrophilic	<70	<180	DC-70- 70- 01P2	POA	POA	ΡΟΑ	9033 00 00 00	3842500 0-0
DropChip; hydrophilic	<80	<268	DC-80- 80- 01P2	POA	POA	POA	9033 00 00 00	3842500 0-0

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DropChip:	<30	<14	DC-30-	POA	POA	POA	9033 00 00 00	3842500
hvdrophobic			30-	_		-		0-0
,			02P2					
DropChip:	<40	<33	DC-40-	POA	POA	POA	9033 00 00 00	3842500
hydrophobic			40-					0-0
,			02P2					
DropChip;	<50	<65	DC-50-	ΡΟΑ	POA	ΡΟΑ	9033 00 00 00	3842500
hydrophobic			50-					0-0
, .			02P2					
DropChip;	<60	<113	DC-60-	POA	POA	POA	9033 00 00 00	3842500
hydrophobic			60-					0-0
			02P2					
DropChip;	<70	<180	DC-70-	POA	POA	POA	9033 00 00 00	3842500
hydrophobic			70-					0-0
			02P2					
DropChip;	<80	<268	DC-80-	POA	POA	POA	9033 00 00 00	3842500
hydrophobic			80-					0-0
			02P2					

VenaDeltaY1[™] Biochips

Each biochip contains four Y-shaped capillaries in parallel which can be coated with different adhesion molecules for cell receptor-ligand cell-matrix (i.e. interactions) studies under shear flow with dual-injection (chemotaxis experiments) or for investigation of thrombi formation at the Y-channel branch. Each pack contains 10 biochips = 40 assays. There are two different sizes of microchannels available. Dimensions of microchannels: 400 (W) x 100 (D) or 800 (W) x 120 (D). Compatible with ExiGo pump, UniGo pump, 4U pump, Mirus Evo nanopump, Kima pump.



Product	Product code	List price 2018	Harmonisation codes	CPV codes
VenaDeltaY1 biochip (Pack 10)	VDY1-400- 100-1-1P10	POA	9033 00 00 00	38425000-0
VenaDeltaY1 biochip (Pack 10)	VDY1-400- 100-1-1P10	POA	9033 00 00 00	38425000-0
VenaDeltaY1 biochip (Pack 10)	VDY1-800- 120-1-1P10	POA	9033 00 00 00	38425000-0
VenaDeltaY1 biochip (Pack 10)	VDY1-800- 120-1-1P10	ΡΟΑ	9033 00 00 00	38425000-0

NOTE: there is a minimum order of 6 packets.

VenaDeltaY2[™] Biochips

Each biochip contains four Y-shaped capillaries at both ends in parallel which can be coated with different adhesion molecules for cell receptor-ligand (i.e. cell-matrix interactions) studies under shear flow with dual-injection (chemotaxis experiments) or for investigation of thrombi formation at the Y-channel branch. Each pack contains 10 biochips = 40 assays. Dimensions of microchannels: 600 (W) x 100 (D). Compatible with ExiGo pump, UniGo pump, 4U pump, Mirus Evo nanopump, Kima pump.



Product	Product code	List price 2018	Harmonisation codes	CPV codes
VenaDeltaY2 biochip (Pack 10)	VDY2-600- 100-2-1P10	ΡΟΑ	9033 00 00 00	38425000-0
VenaDeltaY2 biochip (Pack 10)	VDY2-600- 100-2-1P10	ΡΟΑ	9033 00 00 00	38425000-0

NOTE: there is a minimum order of 6 packets.

VenaDeltaT[™] Biochips

Each biochip contains four T-junction shaped capillaries in parallel which can be coated with different adhesion molecules for cell receptor-ligand (i.e. cell-matrix interactions) studies under shear flow with dual-injection (chemotaxis experiments) or for investigation of thrombi formation at the T-channel branch. Each pack contains 10 biochips = 40 assays. Dimensions of microchannels: 400 (W) x 100 (D). Compatible with ExiGo pump, UniGo pump, 4U pump, Mirus Evo nanopump, Kima pump.



Product	Product code	List price 2018	Harmonisation codes	CPV codes
VenaDeltaT biochip (Pack 10)	VDT-400- 100-1-1P10	POA	9033 00 00 00	38425000-0
VenaDeltaT biochip (Pack 10)	VDT-400- 100-1-1P10	ΡΟΑ	9033 00 00 00	38425000-0

NOTE: there is a minimum order of 6 packets.

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VenaDeltaW[™] Biochips

Each biochip contains two W-junction shaped capillaries with one Y-junction shaped capillary in the centre which can be coated with different adhesion molecules for cell receptor–ligand (i.e. cell–matrix interactions) studies under shear flow with dual-injection (chemotaxis experiments) or for investigation of thrombi formation at the W or Y-channel branch. Each pack contains 10 biochips = 30 assays. Dimensions of microchannels: 400 (W) x 100 (D). Compatible with ExiGo pump, UniGo pump, 4U pump, Mirus Evo nanopump, Kima pump.



Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
VenaDeltaW biochip (Pack	VDW-400-	POA	9033 00 00 00	38425000-0
10)	100-1-1P10			
VenaDeltaW biochip (Pack	VDW-400-	POA	9033 00 00 00	38425000-0
10)	100-1-1P10			

NOTE: there is a minimum order of 6 packets.

Custom Biochips

Cellix provide variations on the above footprint. Prices vary. Please contact us directly for more information.

Microfluidic Pumps

Droplet Generation Kit

The droplet generation kit contains everything a researcher needs to get started:

- 2 x ExiGo pumps: iPad mini or PC (LabVIEW, Matlab, Python) control
- 2 x Flow sensors
- 2 x DropChips
- Tubing kit
- Oil and chip pre-coating solution
- Power supply & cables









Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
Droplet Generation Kit, PC	DGKit-1.0	POA	8413 19 00 90	3800 0000-5
control (LabVIEW, Matlab,				
Python etc.)				
Droplet Generation Kit, iPad	DGKit-2.0	POA	8413 19 00 90	3800 0000-5
mini control				

Additional ExiGo pumps, flow sensors or biochip packs (refer to DropChip) can be ordered separately.

Oil/surfactant solution and pre-coating solution can be ordered using the following codes:

Product	Product code	List price	Harmonisation	CPV codes
		2018	codes	
DropGen oil & surfactant	DROPGEN-OIL-	POA	9033 00 00 00	24327300-5
solution; 10.0 mL	SURF-10			
DropGen oil & surfactant	DROPGEN- OIL-	POA	9033 00 00 00	24327300-5
solution; 20.0 mL	SURF-20			
DropGen oil & surfactant	DROPGEN- OIL-	POA	9033 00 00 00	24327300-5
solution; 50.0 mL	SURF-50			
DropGen chip pre-coat	DROPGEN-	POA	9033 00 00 00	24327300-5
solution; 2.5 mL	CHIP-PRECOAT-			
	2.5			

IMPORTANT: Please note that hot-plugging ExiGo pumps is extremely damaging to the equipment. This means any installation or removal of pumps to a set-up must be done when the system is off. Removing the pumps while the system is running can cause electrostatic discharge which can severely damage the electrical components of the pump including the PCB and will likely result in your pump requiring repair at Cellix. When docking or un-docking two pumps together the system must be off, and the residual electrostatic discharge cleared by pressing the power button in one short movement. Only then can pumps be docked. If you are buying a two or more ExiGos, you must purchase a clamp base made of aluminium. This holds the pumps in place and reduces risk of damage to electrical components by ensuring they do not separate.

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Kima™ Kit

The Kima Kit contains everything a researcher needs to get started:

- Kima pump
- iPod Touch with controller
- Power supply & cables
- 100 mL Bottle with GL45 cap
- Tubing kit
- Velcro strips
- 1 x pack of Vena8 Endothelial+ biochips (contains 10 biochips)



Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
Kima kit, iPod Touch control	KIMA-KIT- 1.0	POA	8413 19 00 90	3800 0000-5
Kima kit, PC control	KIMA-KIT- 2.0	ΡΟΑ	8413 19 00 90	3800 0000-5

Additional Kima pump modules (excluding iPod Touch and controller; code=KIMA) or biochip packs can be ordered using the following codes:

Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
Vena8 Endothelial+ biochip	V8EP-800-	POA	9033 00 00 00	38425000-0
(Pack 10)	120-02P10			
Vena8 Endothelial + biochip	V8EP-800-	POA	9033 00 00 00	38425000-0
(Pack 5)	120-02P5			
Vena8 Endothelial + biochip	V8EP-800-	POA	9033 00 00 00	38425000-0
(Pack 10)	120-02P10			
Kima pump 1.0	KIMA	POA	8413 19 00 90	42122500-5

NOTE: the Kima pump is not suitable for shear stressed based assays because the pump delivers liquid in pulses (not continuous flow).

Pump and Biochip Accessories

Biochip-Connect: Pre-Assembled Single Inlet/Outlet Cables for Biochips

General purpose single inlet cable

General purpose connection; connect any flow chamber or biochip to Cellix's microfluidic pump. The silicone tubing is 40 cm long. One end has a male Luer to barb adapter; the other end has a female Luer. Suitable for connection general flow chamber or biochip to Cellix's ExiGo pump, UniGo pump, 4U pump and Mirus Evo nanopump.

Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
General purpose single inlet	GENERAL-	POA	9033 00 00 00	42122500-5
cable (Pack 20)	PURPOSE-			
	B1IC-PK20			

Biochip-connect: single inlet cable

The inlet cable is 10 cm long. Pack of disposable pre-assembled single inlet cables to connect from ExiGo pump, UniGo pump, 4U pump, Kima pump and Mirus Evo nanopump to the inlet of the biochip.

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Biochip-connect biochip single inlet cable (Pack 10)	BIOCHIP- CONNECT- B1IC-PK10	ΡΟΑ	9033 00 00 00	42122500-5





Biochip-connect biochip single inlet cable

Biochip-connect: single outlet cable

The outlet cable is 10 cm long. Pack of disposable pre-assembled single outlet cables to connect from outlet of the biochip to an Eppendorf for waste or sample collection.

Product	Product	List price	Harmonisation	CPV codes
	code	2018	codes	
Biochip-connect biochip	BIOCHIP-	POA	9033 00 00 00	42122500-5
single outlet cable (Pack 10)	CONNECT-			
	B1OC-PK10			





Biochip-connect biochip single outlet cable

Biochip-Connect-Manual: Components for Manual Assembly of Single Inlet/Outlet Cables for Biochips

Tubing

Roll of Tygon tubing for manual assembly of biochip-connect single inlet and outlet cables. Supplied as a roll of 100 ft.

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Tygon tubing for biochip-	TUBING-TYGON-	POA	9033 00 00 00	42122500-5
connect single cables	BIC-B1OC-			
	ROLL100FT			



Biochip-connect outlet cable showing Tygon tubing

Inlet Connectors

Connectors with stainless steel pins for manual assembly of biochip-connect inlet cables. Supplied as pack of 100.

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Connectors for single	CONNECTORS-	POA	9033 00 00 00	42122500-5
inlet cables of biochips	B1IC-PACK100			



Biochip-connect inlet cable with close-up of connector

Outlet Pins

Stainless steel pins for manual assembly of biochip-connect inlet and outlet cables. Supplied as pack of 200.

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Pins for single inlet and	SS-P-B1IC-B1OC-	POA	9033 00 00 00	42122500-5
outlet cables of biochips	PACK200			



Biochip-connect outlet cable with close-up of stainless-steel pin

Tubing Splitters for ExiGo[™], Kima[™], UniGo[™], 4U[™] and Mirus Evo[™] nanopump for any Microfluidic Biochip

8-Way-Splitter

Tubing connects from your pump and splits into 8 independent tubes with needles at the output which can be connected to any microfluidic biochip.

4-Way-Splitter

Tubing connects from your pump and splits into 4 independent tubes with needles at the output which can be connected to any microfluidic biochip.



8-way splitter tubing



4-way splitter tubing

Product	Product code	List price 2018	Harmonisation codes	CPV codes
8-way splitter with tubing for pump	8-WAY- SPLITTER- TUBING	ΡΟΑ	9033 00 00 00	42122500-5
4-way splitter with tubing for pump	4-WAY- SPLITTER- TUBING	ΡΟΑ	9033 00 00 00	42122500-5

Kima-Connect: Tubing Set for Kima™ Pump

Kima-Connect-Tubing-Set

Complete set of tubing for Kima pump. Contains 2 pump priming cables; 1 pump inlet cable; 1 pump outlet cable and 1 biochip outlet cable.



ProductProduct codeList price
2018Harmonisation
codesCPV codesKima-connect tubing setKIMA-CONNECT-
SET1POA9033 00 00 0042122500-5



Kima pump showing fluidic connections

Mirus-Connect: Tubing set for Mirus[™] Pumps

Mirus-Connect-Tubing-Set

Complete set of tubing for Mirus Evo nanopump and Mirus 2.0 nanopump. Contains 1 pump inlet cable; 1 pump outlet cable and 1 pump-to-MultiFlow8 cable.



Mirus-Evo-connect-set

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Mirus-Evo-connect tubing set	MIRUS-EVO- CONNECT-SET1	POA	9033 00 00 00	42122500-5
Mirus-2.0-connect tubing set	MIRUS-2.0- CONNECT-SET	ΡΟΑ	9033 00 00 00	42122500-5



Mirus1-connect-Evo pump Inlet cable

Connection



Mirus2-connect-Evo pump outlet cable

Connection



MultiFlow8-Connect: Connections from MultiFlow8™ to Vena8™ biochips

MF8-Connect-Biochip1: MultiFlow8 to Biochip Inlet

This cable contains 8 assembled tubes to connect from the MultiFlow8 of the Mirus Evo nanopump to the inlet of the biochip. No nozzles included; these are already on the MultiFlow8. This will only need to be replaced after wear and tear which is typically every 6 months depending on system usage and maintenance.



MultiFlow8 connected to biochip



MF8-Connect-Biochip1 Inlet Cable

Product	Product code	List price 2018	Harmonisation codes	CPV codes
MF8-connect-biochip1	MF8-CONNECT-	POA	9033 00 00 00	42122500-5
inlet cable	BIC1			

MF8-Connect-Biochip3: MultiFlow8 to Biochip Inlet

The cable is connected from the MultiFlow8 of the Mirus Evo nanopump to the inlet of the biochip, using large bore tubing for thrombosis experiments. Larger tubes facilitate higher shear flow studies.



MF8-connect-biochip3 inlet cable

Product	Product code	List price 2018	Harmonisation codes	CPV codes
MF8-connect-biochip3	MF8-CONNECT-	POA	9033 00 00 00	42122500-5
inlet cable for	BIC3-			
thrombosis experiments	THROMBOSIS			

Multiflow8 Nozzles

Replacement nozzles for Multiflow8 manifold. Standard and thrombosis nozzles available.



Mutliflow8 nozzle, standard



Mutliflow8 nozzle, thrombosis

Product	Product code	List price 2018	Harmonisation codes	CPV codes
MultiFlow8 nozzles, standard (Pack8)	MF8N1-PACK8	POA	9033 00 00 00	42122500-5
MultiFlow8 nozzles for thrombosis experiments (Pack 8)	MF8N2- THROMBOSIS- PACK8	ΡΟΑ	9033 00 00 00	42122500-5

Mirus Evo and Mirus Nanopump 2.0 Replacement Parts

Syringes

Replacement syringes for Mirus Evo and Mirus Nanopump 2.0.



Replacement syringe 500 μL for Mirus Evo or Mirus nanopump 2.0

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Mirus nanopump syringe	MIRUS-PUMP-	POA	9033 00 00 00	33141310-6
100 μL	SYRINGE-100 μL			
Mirus nanopump syringe	MIRUS-PUMP-	POA	9033 00 00 00	33141310-6
250 μL	SYRINGE-250 μL			
Mirus nanopump syringe	MIRUS-PUMP-	POA	9033 00 00 00	33141310-6
500 μL	SYRINGE-500 μL			
Mirus nanopump syringe	MIRUS-PUMP-	POA	9033 00 00 00	33141310-6
1 mL	SYRINGE-1 ML			
Mirus nanopump syringe	MIRUS-PUMP-	POA	9033 00 00 00	33141310-6
5 mL	SYRINGE-5 ML			

Kima Pump Replacement Parts

Kima Pump Cell Culture Bottle



Kima pump cell culture bottle

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Kima pump cell culture bottle	KIMA-PUMP- CCBOTTLE	ΡΟΑ	9033 00 00 00	42122500-5

Miscellaneous Accessories

Humidified Box

Humidified chamber to store biochips; prevents evaporation of adhesion molecules.



Humidified chamber

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Humidified box	HUMID-BOX	POA	9033 00 00 00	42122500-5

Eppendorf Holder

Eppendorf holder for two 10 ml tubes. Fits onto standard frame.



Eppendorf holder

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Eppendorf holder	FRAME-TUBE	POA	9011 90 90 00	42122500-5

Biochip Frames for Inverted Microscopes

Biochip Frame K Vena8[™]

Biochip frame for Vena8 biochip range only - 160 x 110 mm. Includes frame base, top cover and Eppendorf holder. Compatible with manual stage for Nikon microscopes (flat stage with circular section) where frame sits on top of stage but is not clamped. Also compatible with motorised stage (Prior, Marzhauser, Ludl).



Product	Product code	List price 2018	Harmonisation codes	CPV codes
Biochip frame K Vena8	FRAME-K-V8	POA	9033 00 00 00	42122500-5

Biochip Frame P Vena8™

Biochip frame for Vena8 biochip range only — 90×130 mm. Includes frame base, top cover and Eppendorf holder. Compatible with manual stage for Olympus microscopes (not a flat stage and has 2 guides which move) where frame sits on top of stage and connects to two guides.



Product	Product code	List price 2018	Harmonisation codes	CPV codes
Biochip frame P Vena8	FRAME-P-V8	POA	9033 00 00 00	42122500-5

Biochip Frame M Vena8™

Biochip frame for Vena8 biochip range only — 165×100 mm. Includes frame base, top cover and Eppendorf holder. Compatible with manual stage for Zeiss Axiovert microscopes (not a flat stage and has 2 guides which move) where frame sits on top of stage and connects to two guides.



Product	Product code	List price 2018	Harmonisation codes	CPV codes
Biochip frame M Vena8	FRAME-M-V8	POA	9033 00 00 00	42122500-5

Micro-Environmental Chamber

Biochip holder providing temperature.



Product	Product code	List price 2018	Harmonisation codes	CPV codes
Micro-environmental chamber	FRAME-MEC-V8	POA	9011 90 90 00	38436310-6

Biochip Custom Frames

Custom frames available for other microscope stages.

The tables above list stage adapters known to be compatible with most common microscope stages. However, since each microscope can support many stages, you should compare the adapter dimensions to the stage cut-out before ordering.

Software

Image Pro Premier Cell Analysis Software

Cell Image Analysis Software for morphology analysis; analysis of movies (*.avi etc.) for cell flow, rolling (i.e. speed) and migrating cells; analysis of time-lapse movies. Supplied in partnership with Media Cybernetics.

Image-Pro Premier analysis software

Product	Product code	List price 2018	Harmonisation codes	CPV codes
Image Pro Premier	IMAGE-PRO- PREMIER	ΡΟΑ	8523 4045 00	48328000-3

VenaFlux[™] Assay Software Integration

The integration of VenaFlux assay software to work with cameras, stages and microscopy components from different manufacturers.



VenaFlux assay software integration

Product	Product code	List price 2018	Harmonisation codes	CPV codes
VenaFlux assay software integration	VENAFLUXASSAY- INTEGR	ΡΟΑ	8523 4045 00	72227000-2

VenaFlux[™] Automated Platforms: Example Configurations

The VenaFlux platform is the first semi-automated microfluidic platform capable of executing cell rolling, binding/adhesion and migration studies under shear flow mimicking in vivo flow rates. For higher throughput requirements of cell-based assays under shear flow, the VenaFlux platform will meet your needs.



VenaFlux platform

VenaFlux Platform Configuration 1

Code = VENAFLUX-CONFIG1

POA — please contact for customised quotation.

- Flow apparatus: Mirus Evo nanopump and Kima pump
- Microscopy workstation: Zeiss Axio Vert A1 fluorescence microscope with manual stage and QImaging Retiga R3 digital camera
- Temperature control option = microenvironmental chamber which heats biochip only
- Cell Analysis Software = Image Pro Premier
- PC with software pre-installed and tested
- Includes VenaFlux assay integration software for Mirus Evo and digital camera
- Includes biochip frame compatible with Zeiss microscope

VenaFlux Platform Configuration 2

Code = VENAFLUX-CONFIG2A

POA — please contact for customised quotation.

- Flow apparatus: Mirus Evo nanopump and Kima pump
- Microscopy workstation: Zeiss Axio Vert A1 fluorescence microscope with manual stage, digital camera (choose from options listed below)
- Temperature control option = microenvironmental chamber which heats biochip only
- Cell analysis software = Image Pro Premier
- PC with software pre-installed and tested
- Includes VenaFlux assay integration software for Mirus Evo and digital camera
- Includes biochip frame compatible with Zeiss microscope

Options:

Digital camera choices = QImaging Retiga R3 camera or QImaging Retiga R6 (upgrade). Application recommendations: recommended for leukocyte assays and thrombosis assays as this option includes a higher quality digital camera for platelet studies.

Code = VENAFLUX-CONFIG2B

POA — please contact for customised quotation.

- Flow apparatus: Mirus Evo nanopump and Kima pump
- Microscopy workstation: Zeiss Axio Vert A1 fluorescence microscope with motorized stage, digital camera (choose from options listed below)
- Temperature control option = microenvironmental chamber which heats biochip only
- Cell analysis software = Image Pro Premier
- PC with software pre-installed and tested
- Includes VenaFlux assay integration software for Mirus Evo, digital camera and motorized stage
- Includes biochip frame compatible with Zeiss microscope

Options:

Digital camera choices = QImaging Retiga R3 camera OR QImaging Retiga R6 (upgrade) Application recommendations: recommended for leukocyte assays and thrombosis assays as this option includes a higher quality digital camera for platelet studies.

VenaFlux Platform Configuration 3

Code = VENAFLUX-CONFIG3

POA — please contact for customised quotation.

- Flow apparatus: Mirus Evo nanopump and Kima pump
- Microscopy workstation: Zeiss Axio Observer A1 microscope with motorized stage, digital camera (choose from options listed below)
- Temperature control option = microenvironmental chamber which heats biochip only
- Cell analysis software = Image Pro Premier
- PC with software pre-installed and tested
- Includes VenaFlux assay integration software for Mirus Evo, digital camera and motorized stage
- Includes biochip frame compatible with Zeiss microscope

Options:

Digital camera choices = QImaging Retiga R3 camera OR QImaging Retiga R6 (upgrade) Application recommendations: recommended for leukocyte assays and thrombosis assays as this option includes a higher quality digital camera for platelet studies.

VenaFlux Platform Configuration 4

Code = VENAFLUX-CONFIG4

POA — please contact for customised quotation.

- Flow apparatus: Mirus Evo nanopump and Kima pump
- Microscopy workstation: Zeiss Axio Observer Z1 microscope with motorized stage, digital camera (choose from options listed below)
- Temperature control option = microenvironmental chamber which heats biochip only
- Cell analysis software = Image Pro Premier
- PC with software pre-installed and tested
- Includes VenaFlux assay integration software for Mirus Evo, digital camera and motorized stage
- Includes biochip frame compatible with Zeiss microscope

Options:

Digital camera choices = please contact Cellix for more information. Application recommendations: Screening labs.

VenaFlux Platform Upgrade Options

Digital Camera Options



QImaging Retiga R1 camera

- Imaging array: 1360 x 1024 Sony ICX-825 CCD (monochrome or colour)
- Binning: 1x1, 2x2, 4x4, 8x8, 12x12, 16x16
- Frame rate: 10 fps at full resolution and 40 fps binned 2x2
- Quantum efficiency: 75% at 600 nm
- Readout noise: <5.5 e RMS
- Sensor cooling: -15°C stabilized at 22°C ambient. Thermoelectric cooling with forced air

Applications: brightfield, phase-contrast, darkfield & fluorescence microscopy including green fluorescent protein (GFP) applications, FISH. Fast sensitive imaging and documentation.

Product	Product code	List price 2018	Harmonisation codes	CPV codes
QImaging Retiga R1	QIMAGING-01-	POA	9011 20 90 00	38651000-3
Camera	RET-R1-R-M-16-C			



QImaging Retiga R3 camera

- Imaging array: 1920 x 1460 Sony ICX-674 CCD (monochrome or colour) 2.8 MP
- Binning: 1x1, 2x2, 4x4, 8x8, 12x12, 16x16
- Frame rate: 14.4 fps at full resolution and 24.1 fps binned 2x2
- Quantum efficiency: 75% at 600 nm
- Readout noise: <5.5 e RMS
- Sensor cooling: -12°C stabilized at 22°C ambient. Thermoelectric cooling with forced air

Applications: brightfield, phase-contrast, darkfield & fluorescence microscopy including green fluorescent protein (GFP) applications, FISH. Time lapse imaging, slide scanning.

Product	Product code	List price 2018	Harmonisation codes	CPV codes
QImaging Retiga R3	QIMAGING-01-	POA	9011 20 90 00	38651000-3
Camera	RET-R3-R-M-16-C			



QImaging Retiga R6 camera

- Imaging array: 2688 x 2200 Sony ICX-695 CCD (monochrome or colour) 6.0 MP
- Binning: 1x1, 2x2, 4x4, 8x8, 12x12, 16x16
- Frame rate: 7.1 fps at full resolution and 12.8 fps binned 2x2
- Quantum efficiency: 75% at 600 nm
- Readout noise: <5.5 e RMS
- Sensor cooling: -15°C stabilized at 22°C ambient. Thermoelectric cooling with forced air

Applications: brightfield, phase-contrast, darkfield & fluorescence microscopy including green fluorescent protein (GFP) applications, FISH. Fast sensitive imaging and documentation. Tile-and-stitch microscopy, stereo microscopy.

Product	Product code	List price 2018	Harmonisation codes	CPV codes
QImaging Retiga R6	QIMAGING-01-	POA	9011 20 90 00	38651000-3
Camera	RET-R1-R-M-16-C			

Temperature Control Options

Micro-environmental chamber: biochip holder providing controlled temperature conditions.



Product	Product code	List price 2018	Harmonisation codes	CPV codes
Micro-environmental chamber	FRAME-MEC-V8	POA	9011 20 90 00	38436310-6

Automation: Microscope Motorised Stage and Z-drive

- XY travel: 4" x 3" (114 x 76 mm)
- Repeatability: <1 μm
- Resolution: 0.01 μm
- Sample holder: customised interface for Vena8 biochip
- Includes PC controller, joystick and cables



Product	Product code	List price 2018	Harmonisation codes	CPV codes
Motorized stage	STAGE_120_100_1MM	POA	9011 20 90 00	38519400-0

Cellix Ltd.

Unit 1, Longmile Business Park Longmile Road, D12EK79 Dublin, Ireland

Focus Drive Add-on for Motorized Stage

For supplementary automation of the Z-axis, the focus drive is installed by removing the fine focus knob from the microscope and fixing the MA 42, in conjunction with a special coupling, directly to the shaft of the fine focus. This method prevents any slippage, or loss of steps. Requires motorized stage.



Product	Product code	List price 2018	Harmonisation codes	CPV codes
Focus drive for microscope	FOCUS_DRIVE_STAGE	ΡΟΑ	9011 20 90 00	38519600-2

Service Items

Product	Product code	Product	List price	Harmonisation
		Description	2018	codes
Training	TRAINING-DAY	Service —	POA	9953
		training; daily rate		
Service	CONTRACT-SERVICE	Service	POA	9953
contract				
Equipment	EQUIPT-LEASE	Equipment rental	POA	991399
rental/leasing		and leasing		
Delivery	DELIVERY_CHARGE	Delivery Charge	POA	991399
charge				