



ISCUS^{flex}

MICRODIALYSIS ANALYZER

- Third generation Microdialysis Analyzer for point-of-care and advanced research
- Monitoring up to eight patients
- Batch analysis capacity of 16 samples

Monitoring of tissue Metabolic Markers

ISCUS^{flex} is the third generation Microdialysis Analyzer for point-of-care monitoring and advanced research. The analyzer uses enzymatic reagents and colorimetric measurements to monitor tissue chemistry from virtually any tissue or organ in the body. Microdialysis is a monitoring technique for continuous sampling of tissues and organs. Chemical substances in the interstitial fluid are sampled by a microdialysis catheter and analyzed in ISCUS^{flex}.

ISCUS^{flex} offers opportunities to optimize patient treatment in the ICU by detecting pathological changes before clinical signs become evident. MDialysis have catheters for monitoring the brain, liver, abdomen, blood, muscle, adipose tissue and skin.

Enhanced Features and Optimized Performance

ISCUS^{flex} combines reliability and flexibility. This analyzer has the opportunity to monitor up to eight patients at a time and is ideal for use in the intensive care. With a capacity of 16 vials, ISCUS^{flex} offers batch analysis for advanced clinical research. The throughput of the analyzer is maximum 30 measurements per hour.

The analyzer is easy to operate by medical or laboratory professionals. Up to six different reagents and automated control samples provide unique opportunities for early detection of metabolic crisis, ischemia and to guide post-operative interventions. Data is displayed as trendcurves for easy and fast interpretation.

Intended purpose

ISCUS^{flex} is a Microdialysis Analyzer intended for supporting clinical decisions based on tissue chemistry. ISCUS^{flex} is only intended for the analyses of microdialysis samples. The device shall not be used as the sole basis for decisions as to diagnosis or therapy. ISCUS^{flex} is also intended to be used for general research purposes.

THE STATE OF THE ART ISCUS^{flex} offers third generation reliability and flexibility combined into a single unit.

Available Reagents:

Glucose
Lactate
Pyruvate
Glycerol
Glutamate
Urea



Key Features of the ISCUS^{flex}:

- ISCUS^{flex} offers unique opportunities to individualize and optimize patient care in the ICU by detecting pathological changes before clinical signs become evident
- Continuous and near real-time monitoring of metabolites sampled by M Dialysis's suite of Microdialysis catheters
- High flexibility with the possibility to monitor up to eight patients simultaneously, with 16 sample positions
- Quick one-button analysis in less than two minutes per analyte with six available reagents: **glucose, lactate, pyruvate, glycerol, glutamate and urea**
- Automatic flushing of sample after analysis, automatic calibration and quality control
- Removable vial cassette with 16 positions for batch analysis. ISCUS^{flex} is capable of running low concentration samples for research purposes
- ISCUS^{flex} is delivered with the ICUpilotTM software that enables you to visualize, compare and compute patient data on a separate computer
- Maximum throughput is 30 measurements per hour



Technical information

Dimensions	430 (H) x 350 (W) x 270 (D) mm	Warm-up time	10 minutes
Weight	29 lbs/13 kg	Measuring time	30 seconds
Voltage	100-240 V~, 50/60 Hz	Throughput time/test	90 seconds
Power consumption	100 VA	Detector type	Single beam filter photometer
Type of protection	Class 1, Type B	Light source	Class 1 LED
Measurement principle	Kinetic enzymatic analyzer	Wavelengths	375 and 530 nm
Vials	Microvials or CMA Glass vials	Detector cell	Capillary flow cell 10 mm, 2 µL
Samples	Microdialysates	Detector cell	Temperature 99 °F / 37 °C
Min. sample volume	Sum of sample volumes per analyte + 2 µL	Assay imprecision	<4 % rel. standard deviation within run for "Control Samples Normal"
Pipetting imprecision	<2 % (at 0.5 µL) rel. standard deviation	External Communications Port	SD Card Slot, USB Port, Network Port
Calibration	Automatic (every 6 hrs)		

Ordering information

	Ref.No.
ISCUS ^{flex} Microdialysis Analyzer, for Clinical Use	8003295
ISCUS ^{flex} Microdialysis Analyzer, for Research Use Only	8003296
Accessories:	Ref.No.
Reagent Set A: Glucose 1x6mL, Lactate 1x6mL, Pyruvate 1x6mL, Glycerol 1x6mL, Calibrator A 1x6mL	8002163
Reagent Set B: Glucose 1x6mL, Lactate 1x6mL, Pyruvate 1x6mL, Glycerol 1x6mL, Glutamate 1x4mL, Calibrator A 1x6mL	8002164
Reagent Set C: Glucose 1x6mL, Lactate 1x6mL, Pyruvate 1x6mL, Calibrator A 1x6mL	8002165

	Ref.No.		Ref.No.
Glucose Reagent, 5/pkg	P000023	Control Samples, 3 levels, 3x3/pkg	8010201
Lactate Reagent, 5/pkg	P000024	Rinsing fluid, 0.5 L, 8/pkg	8002171
Pyruvate Reagent, 5/pkg	P000063	Waste bottle, 0.5 L, 8/pkg	8002161
Glycerol Reagent, 5/pkg	P000025	Thermal print paper, 30.5 m, 4/pkg	8002162
Glutamate Reagent, 5/pkg	P000064	Sample Cannula, 1/pkg	8001721
Urea Reagent, 5/pkg	P000026	Vial Cassette, 1/pkg	8003409
Calibrator A, 10/pkg	P000057	Secure Digital Memory Card, 1/pkg	8002360

CE	Intended for Medical Purpose according to EU In Vitro Diagnostic Medical Device Regulation (IVDR) 2017/746
IVD	In Vitro Diagnostic Medical Device



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